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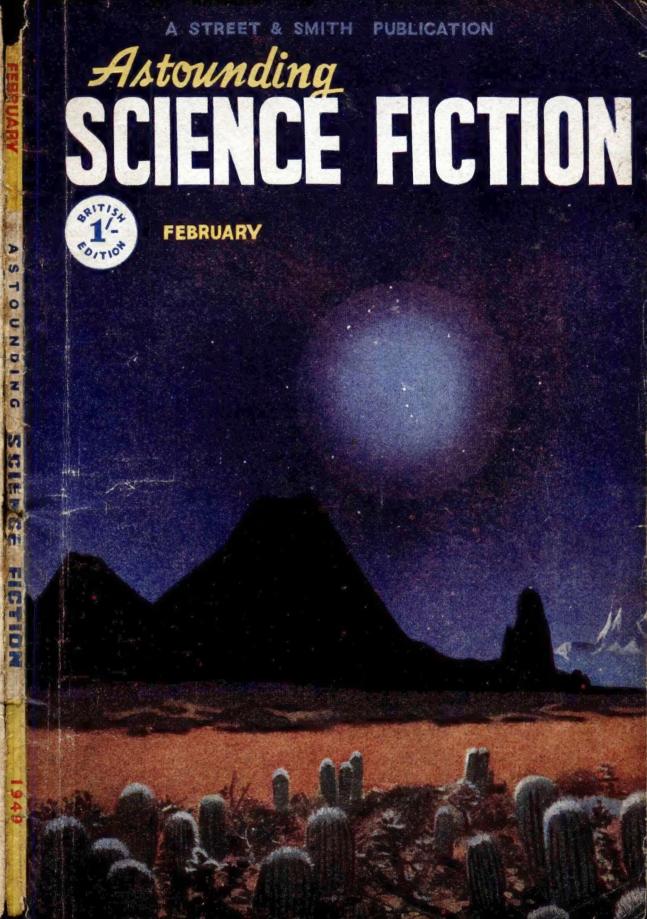
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ASTOUNDING

SCIENCE FICTION

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February 1949

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All stories in this magazine are fiction. No actual persons are designated either by name or character. Any similarity is coincidental.

THE CATSPAW

By GEORGE O. SMITH

Somebody, somewhere, had a fine idea, evidently that was just a leetle too hot to try out at home. So they wanted someone else to try it—

THOMAS BARDEN slept fitfully. The dream was not a nightmare, but it was annoying It was like the important thought that does not quite struggle up through into consciousness but which remains unformed though the mind is aware of the hidden importance. It was like trying to read small print through a silk screen or to see fine detail through a sheet of florentine glass.

Furthermore, it was recurring.

Strangely, Tom Barden seemed to know that there was something strange about the dream, that it was more than just the ramblings of the subconscious mind. He knew that there was something to be gained by permitting the dream to run while he watched, so to speak. But the trouble was that the dream could not run so long as he remained cognizant enough in sleep to make mental notes. When he slept deep enough to permit the strange dream, he was deep enough to lose track of the delicate, and so very alien, train of thought.

The fitful sleep itself was a contributing factor to ultimate success. Since he slept not, he became drowsily tired and found himself lying wide awake time and again with strange semi-daydreams in which conscious thought and dream intermingled in a bizarre fantasy of fact and fiction.

He had been asleep or awake for hours. It was nearing four o'clock in the morning when Tom Barden slipped into a prolonged half-sleep and the dream, as it had before,

came again

He slipped into sleep and in dream, he saw himself luxuriously lounging on a broad couch. Above his head was a draped canopy of silk, its draped folds hanging low in a gorgeous pattern of silken folds. It was gently tinted in delicate colors that blended in a complete lack of regular pattern. It seemed more beautiful for lacking pattern than it could have been with any regularity.

It was none-ending, that canopy. From the draped dome above his couch the silken cyclorama fell in a colorful swirl to the floor where it folded over and over some-

where miles below the couch.

He-was isolated. He was protected, No intrusion could come even though Thomas

Barden wanted the intrusion. Certainly if he denied entry, nothing could enter.

And yet he knew that beyond the many layers of flowing silk there was something demanding entry. He could not see nor hear the would-be intruder. He could not even see motion of the silk to show that there was such a being. Yet he seemed to sense it.

And when, finally, the intruder breached the outer layers of shrouding silk, Tom Barden knew it and was glad. Course after course of silken screen was opened by the intruder until finally the silk parted before his eves and there entered—

Sentience!

It was without form and void.

But it was sentience and it was there for a definite purpose. It came and it hovered over Thomas Barden's broad couch and its thoughts were apparent. It was in communication with another sentience outside—

"I am in."

"Good," was the mental reply, also clear to Thomas Barden. It was not a direct communication from the other. It came relayed through the sentience above his bed, and since he was in direct mental communication with the other, thought and reply were clear also to Barden. "Good," replied the other. "Be quick and be thorough. We may never return!"

"You, sentience, listen for we have too little time. Those of your system are numbered in the billions, and of them all, you are the only one we have been able to contact though we have tried constantly for

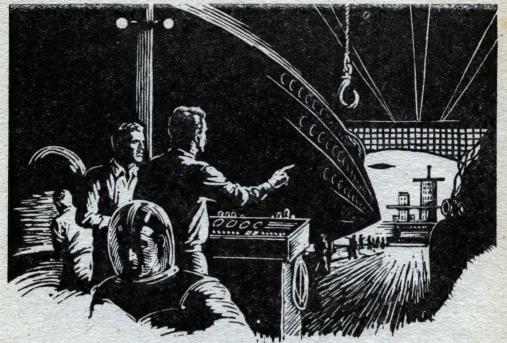
several years.

"As I communicate with you, your subconscious mind is being filled with a specialized knowledge of a science new to you. This science is not foreign to you, for it would normally follow the paths of discovery, yet you are not quite ready to discover it for yourselves. We give it to you, knowing that it will only speed up your advancement and it will not cause a passedover space in the normal trend of advancing technology."

"Why are you giving this to us?" de-

manded Barden.

"A natural caution. You fear the com-



plete altruist. I'll explain. This science will enable you to develop your spacecraft drive into a means of interstellar travel. This science is known to us. We are using it now. However, there is a political difficulty on our world. We have two factions. One faction wants conquest and subjugation of all systems that are less fortunate in their sociological and technological development. The other faction believes that any kind of subjugation of another people will lead to war upon war in pyramiding terror. I and my friends are members of this second belief. Since the first group has control, they are preparing to sweep out from our system with their ideal in force. The only way that subjugation of your race, complete with the attending strife, may be stopped is for you to have the same technological developments. Once you meet us as an equal, thoughts of enslaving you can not exist.

"Logical," admitted Barden.

"This science is entering your subconscious mind. It will not be clear to you for many days. I'd suggest rest and contemplation, but not heavy concentration. Learning is a matter of accepting facts and filing them logically in the subconscious mind. Unlike a course of study where fact follows fact, this knowledge is being poured in at high speed. Your subconscious mind is very much like a librarian who has just received a complete file of facts on a new world. Unfortunately these facts must be evaluated in terms of your own world and your own thought. After evaluation, they must be filed in the proper order. The subconscious

never sleeps, but it will take time before the logical order is complete. At that time you will be able to speak with authority on the subject."

"I hope," replied Barden.

"You must! For we have had enough of war and talk of war. War is never fought between peoples who respect one another's ability. Take this knowledge and use it. And some day when you get the honest chance, pass it along to another race so that all men can be equal throughout the galaxy!"

The outsider made swift thought:

"Quickly, for the veil thickens!"

"I must go. It would be dangerous for us both if I am trapped here when the veil closes. Just remember the billions of your men and the constant attempt to penetrate the mind of any one of them. Even this was sheer chance and it is failing—"

The sentience withdrew after a warning cry from the one on the outside. The silken screen closed, joined, and flowed to the

floor without scar.

Barden was once more alone, protected, isolated.

Three weeks. It took Barden three long weeks. He awoke after the initial contact with the alien, and following the alien's advice, considered the matter coolly. It might be true and it might be a dream, but the fitfulness of his nature was gone. Barden then turned over and entered the sleep of the just for nine hours. After this awakening, he contemplated the dream and found it true.

Amazement at the accomplished fact was high, but the flood of knowledge occupied Barden's attention. Things kept coming up out of the dark in his mind that made little sense; other things were clear and sharp and Barden wondered whether these had ever been tried on Terra. They seemed so logical. Then as the days passed, these disconnected facts began to match together. The matrix of knowledge became less broken as the days went by, and—

At the end of three weeks, the sentience was proven correct. Thomas Barden knew, and he knew that he knew the last detail

of a new science.

His only problem was getting this science into operation before the alien world could

come-

He was all alone in this. No one on earth would believe his wild tale. They'd lay it to a nightmare and offer him medical advice. If he persisted, Thomas Barden would be writing his equations on the walls of a padded cell with a blunt crayon when the alien horde came.

And to walk into the Solar Space Laboratory and tell them he had a means of interstellar travel, complete with facts and figures, would get him the same reception as the Brothers Wright, Fulton, and a horde of others. He would be politely shown the door and asked to go away and not bother

them with wildness.

If he had time, he could declare the discovery of a phenomenon and offer it to the scientific world. Then step by step he could lead them all in the final disclosures, or even after a few discoveries had been turned over, he could act the part of a genius and force their hands by making great strides. He had too little time.

If he were wealthy, he could set up his own laboratory and gain recognition by proof. To go to work for another laboratory would mean that he would be forced to do work that he felt unimportant for sufficient a period to gain the confidence of his superiors. To be his own boss in his own laboratory would mean that he would not be required to follow other lines of research; he could do things that would seem downright idiotic to those uninformed of the new science. That plus the fact that not one of the large laboratories would care to spend a small fortune on the cold predictions of a young unknown.

Thomas Barden wondered just how many men had found themselves hating the everlasting Time and Money factors before. A

fine future!

Barden pondered the problem for almost a week. That made a total of four weeks

since the incident.

Then came a partial solution. He was an associate member of the Terran Physical Society. He could prepare a paper, purely theoretical in nature, and disclosing the basis

for the new science. It would be treated with skepticism by most of the group, and such a wild-eyed idea might even get him scorn.

Yet this was no time to think of Thomas Barden and what happened to him. This was time to do something bold. For all the men of science who would hear of his theory, a few of them might try. If they tried one experiment, they would be convinced. Once convinced, he would be given credit.

The paper could not be very long. A long paper would be thrown out for divers reasons. A very short, terse paper might get by because it would show the logical development of thought. The reviewing members might think it sheer sophistry, but might allow it if for no other reason than to show how sophistic reasoning could build up a complete technology.

Barden began to make notes. A fiveminute paper, packed with explosive details. He selected this fact and that experiment, chosen for their simplicity and their import-

ance, and began to set them down.

His paper was ten pages long, filled with complex equations and terse statements of the results of suggested experiments. He sent it to the reviewing board and then returned to his studies. For he would have to wait again.

Barden faced the reviewing board exactly eight weeks after the dream. By this time he was getting resigned to waiting. Also the hysteria that made him want immediate action was beginning to die in the face of logic. Obviously the alien culture was not on the verge of heading Solward or the alien mind would have told him that fact. He did mention that there was little time, but the alien would not have bothered if imminent disaster threatened.

Barden believed that the alien was cognizant of the difficulties of introducing a new science to a skeptical world—especially when done by an unknown. Perhaps if the famed Dr. Edith Ward had received the science, a word from her would have sent the men of all Terra, Venus and Mars scurrying to make their own experiments. Of course, Dr. Ward was head of the Solar Space Laboratory and could write high-priority orders for anything short of complete utilization of Luna. She would not require disclosure to have her theories recognized.

Tom Barden wished that she were a member of the reviewing board, for then she might be directly interested. But he noted with some satisfaction that the Laboratory was represented. He faced the chairman confidently, though within him he was pray-

ing for a break.

"Mr. Barden," said the chairman, "you are not familiar with us. Introductions are in order. From left to right, are Doctors Murdoch, Harrison, and Jones. I am Edward

Hansen, the chairman of this reviewing board. Gentlemen, this is Thomas Barden. You have read his brochure?"

There was a nod of assent.

"We have called you to ask a few ques-

tions," said the chairman.

"Gladly," said Barden. At least they were considering it. And so long as it was receiving consideration, it was far better than a complete rejection.

"This is, I take it, an experiment in sheer

semantic reasoning?"

"It is more than that," said Barden slowly. "Not only is the reasoning logical when based upon the initial presumption, but I am firm in the belief that the initial pre-

sumption is correct."

Dr. Murdoch laughed. "I hope you'll pardon me, Mr. Barden. I'm rude, but it strikes me that you are somewhat similar to the prophet who sneers at the short-range predictions and prefers to tell of things that lie a hundred years in the future. By which I mean that testing out any one of your theories here would require the expenditure of a small fortune. The amount to be spent would be far in excess of any practical laboratory's budget unless some return is ex-

"If the premise proves true, though," said Barden, "the returns would be so great as to

warrant any expenditure."
"Agreed," said Murdoch. "Agreed, Just

show me proof." "It is all there."

"Mathematical proof? The only proof of valid mathematics is in the experimental data that agrees. And may I add that when experiment and math do not agree, it is the math that gets changed. As witness Galileo's results with the freely falling bodies."
Barden nodded slowly. "You mean that

mathematics alone is no proof.

"Precisely. Figures do not lie but liars can often figure. No offense, Barden. I wouldn't accuse any man of willful lying. But the math is a lie if it is based on a false premise.

'You have no experimental data at all?"

asked Harrison.

Murdoch looked at Harrison and smiled tolerantly.

"Since Mr. Barden is not independently wealthy he could hardly have made any

experiments," said Murdoch.

Dr. Hansen looked at Barden and said: "I believe that you have stumbled upon this line of reasoning by sheer accident and so firm is your belief in it that you are making an attempt to have it tried?"

Barden smiled. "That is exactly right," he

said earnestly.

"I do admire the semantic reasoning," said Hansen. "I am admittedly skeptical of the premise. Dr. Jones, you represent the Space Laboratory. This seems to be right in your department. What is your opinion?"

"If his theory is correct, great returns are obvious. However, I am inclined to view the idea as a matter of sophistic reasoning.'

Barden hastened to get Dr. Jones' attention. "Look, sir. The same relegation of a theory to sophistic reasoning has happened before. Admittedly this is a new science. So have been several others. Someone must discover them in one way or another. The entire science of electronics was discovered in this way-Maxwell formulated the electromagnetic equations. Hertz made the initial experiments many years later. Marconi reduced them to practice, and then a horde of others came forth with their own contributions. Yet the vast technical holdings throughout the electronic field were initially based upon the mathematical predictions made by Maxwell."

"You seem well trained in logic and reasoning," smiled Hansen. "That was a rather sharp parallel. Yet you must understand our feelings in the matter. First, Maxwell was an accredited scientist before he formulated the famous Equations. Now ifand remember that big if-if this is a truly parallel case, we'd all like nothing better than to give you the acclaim you deserve. On the other hand, you expect us to foster you in your attempt to have millions spent on the experimentation you outline so logically. You must remember, Mr. Barden, that despite the fact that we, none of us, will have a prime function in the disbursement of any funds, we are none the less a primely responsible body. The fact that we permit you to speak will carry much weight. It will be a recommendation by us to the rest of the members. As such we must be cautious.

'Is there no way for an unknown man to make a contribution to science?" asked

Barden.

"Of course. Produce one shred of evidence

by experimentation.

"The cost!" exploded Barden. "You admit that every piece of equipment will require special construction. There is nothing in the solar system at the present time that will be useful.

"All of which makes us skeptical."

Murdoch spoke up: "We're not accusing you of trying to perpetrate a hoax. You must admit, however, that it is quite possible for any man to be completely carried away by his own theories. To believe in them thoroughly, even to the point of despising any man who does not subscribe to the same belief."

"That I do admit. However, gentlemen, I

implore you to try. What can you lose?"
Hansen smiled wistfully "About three million dollars.'

"But think of the results."

Hansen's wistful expression increased. "We're all thinking of the result of dropping about three million dollars at the theory of a young, unknown man. It's a wild gamble, Mr. Barden. We're betting our reputations on ten pages of mathematics and very excellent logic. Can you think of what our reputations would be if your predictions were false?"

"But they are not."

Murdoch interrupted. "How do you know?" he said flatly.

"I have-

"Wait," interrupted Murdoch again.
"Please do not define X in terms of X. It
isn't done except in very cheap dictionaries.
You see, Mr. Barden, you are very earnest
in your belief—for which we commend you.
However self-determination is not enough to
produce a science. Give us a shred of proof."

"Have you reviewed my mathematics?"

demanded Barden.

"Naturally. And we find your mathematics unimpeachable. But an equation is not a flat statement of fact in spite of what they tell you, It is not even an instrument until you deduce from the equation certain postulates."

"But-

"I'll give an example. The simplest form of electronic equation is Ohm's Law. Resistance equals Voltage divided by Current. Or, simpler: E equals IR. That has been proven time and again by experiment. Your equa-tions are logical. Yet some of your terms are as though we were working with Ohm's Law without ever having heard of resistance as a physical fact in the conduction of electricity. Your whole network of equations is sensible, but unless you define the terms in the present-day terminology, we can only state that your manipulation of your mathematics is simple symbolic logic. You state that if P implies notQ, such is so—and then neglect to state what notQ is, and go on to state what you can do with P. Unless we know your terms, we can't even state whether you are dividing by real or unreal factors.

"I see that you are unimpressed."

"Not at all. We hoped that you might have had some experimental evidence. Lacking anything material to support your theory—" Hansen spread out his hands in a gesture of frustration.

"Then I've been wasting my time-and

yours?"

"Not entirely. Will you speak on your paper as an experiment in sheer semantics?"

Barden considered. Perhaps if this could be presented as such it would be better than no presentation at all. Let them think him a crackpot. He'd win in the end. He would give his talk on the basis mentioned and then if there were any discussion afterwards he might be able to speak convincingly enough to start a train of thought.

"I'll do it," he said.

"Good," said Hansen. "The ability to think in semantic symbols is valuable, and every man could use a better grasp of abstract thought. Your paper will be presented next week here. We'll put you on the schedule for one o'clock."

Confidently, Tom Barden faced the sectional group of the Terran Physical Society and made his talk. He noted the interest present on every one of the eighty-nine faces. He prayed for a good reception, for he might be asked to present this paper at the international meeting later. He felt that he was getting an excellent reception, for he had their interest.

He finished his speech and sat down, A buzz filled the room during the recess before discussion, and Barden saw with considerable interest that heads were nodding eagerly. Then the chairman rapped with

his gavel.

"There will now be an open discussion," he said.

The buzz stopped.

"Any questions?" asked Chairman

A hand went up near the back, and was

recognized.

"I am Martin Worthington, I wish to state that the logic is excellent and the delivery was superb. May I ask if the pursuit of such impeccable logic is a matter of training, logical instinct, or by sheer imaginative power, did Mr. Barden momentarily convince himself of the truth of his premise and build up on that basis?"

Barden smiled. "The latter is true. Also, Mr. Worthington, I am still convinced of

the truth of the basic premise."

The hall rang with laughter.

When it died, Barden continued. "Not only am I convinced of the validity of this theory, but I am willing to give all I have or ever hope to have for a chance to prove its worth."

"Then," said Worthington, "we are not so much to be impressed by the excellence of semantic reasoning as we have been. True sophistry is brilliant when the reasoner admits that his basic premise is false. Sophistry is just self-deception when the entire pattern is a firm conviction of the reasoner."

The crowd changed from amusement to a slight anger. The speaker, Barden, had not presented a bit of sheer reasoning. He had been talking on a theme which he firmly believed in!

Another hand went up and was recognized. "I am William Hendricks. May I ask if the speaker has any proof of the existence of such phenomena?"

"Only the mathematical proof presented here—and a more complete study at home. These were culled from the larger mass as being more to the point. It is my belief that the force-fields indicated in equation one may be set up, and that they will lead to the results shown in equation three." "But you have no way of telling?"
"Only by mathematical prediction."

A third hand went up. A slender hand that was instantly recognized as that of Dr. Edith Ward.

"I wish to clarify a point," she said. "Mr. Barden's logic is impeccable, but it is based upon one false premise.

Barden looked at the woman carefully. No one could call her beautiful, but there was a womanly charm about her that was in sharp contrast to the cold facts she held in her brain. She looked about thirty years old, which included the mental adjustment necessary to compare her with a younger woman. That she was the head of the Solar Space Laboratory was in itself a statement of her ability as a physicist.

And the fact that she condemned his beliefs was as final as closing the lid and

driving in the nails.

Period!

"I believe that my own belief is as firm

as Miss Ward's," retorted Barden.

You will find that your premise may be valid, but the end-result is not profitable," she said flatly.

You've experimented?" scoffed Barden. "I don't have to," she said. "I know!"

"Perhaps by feminine intuition?" snapped Tom scathingly.

Edith Ward flushed and sat down abruptly, rebuffed and angry. Chairman Hansen arose and tried to speak, but the wellings and mutterings grew from a low murmur to a loud roar that changed slowly from random sounds of anger to a chant of "Throw him out! Throw him out! Throw him out!" as more and more voices took it up. Hansen banged sharply with his gavel and finally the angry cries died again into the dull muttering.

"We are not a rabble," said Hansen sharply. "I shall ask Mr. Barden to leave quietly. We will then continue with our regular business and forget this unhappy

incident."

Barden left amid a sullen silence.

That was that. That door was closed to him, finally and completely. Barden went home in a blue funk and fretted for several hours. Then determination arose to show them all, and he consulted his notes again. Time-and Money!

Doubtless it had been the same cry a thousand years ago, and there was no doubt that it would be the same stumbling block a million years from now. Perhaps on a different planet of a distant sun if Terra were no longer a running concern,

but it would always be the cry.

Well, he thought, considering both, he did not know how much time he had. He knew he had little money. Also, he knew that no matter what he did he would never know about the time factor nor would he

be able to change it much. Perhaps there might be some way to get money. If he was to be forced into the slow methods, and he failed, he would know that he had tried.

He took his mind from the ever-present problem of putting the science across, and started to inspect the new art from a dispassionate standpoint. It was his first try at looking at the technology from the standpoint of a scientific observer. Since the day of the dream, Tom Barden's one thought had been to initiate this development. Now, for the time being, Tom Bar-den went through his adequate storehouse of alien knowledge to see what other developments he might get out of it.

He grunted aloud: "If they won't let me

build a better spacecraft, I'll build a better

mousetrap!'

Then he laughed, for the new art was so complex and so well developed and so far beyond the present science that there were a horde of little items that could be put to work. The generation of spiral magnetic fluxes, for instance, would far outdo the machinist's magnetic chuck. No plain magnetic attraction this, but a twin-screw of magnetic flux lines throughout the chuckplate and the metal work, fastening them together. There were means of developing a type of superspeed radio communication along a tight beam that could not be tapped. A simple method of multi-circuit thyratron operation that had both an ionization and a deionization time of a fraction of microsecond or even less. A means of amplifying true square waves without distortion—permitting the paradox of the voltage assuming all values between zero and maximum instantaneously during the rise of the wave from zero to peak. A cardfile sorting system capable of maintaining better than three million items and producing any given item with a distribution of near-items on either side—all contained in a desk-cabinet and operating silently within a three-second interval. A magnetophysical means of exhausting vacuum tubes and removing occluded gases from the tube electrodes simultaneously. The latter could be kept in operation constantly during the life of the tube, if need arose.

He fastened on the latter. If it would generate the almost-perfect vacuum in a vacuum tube it would also de-air electron microscopes and all other kinds of equipment.

It was simple, too. It was not one of the direct results of the alien science, but it was an item used to develop the science from present technology. Doing it would not introduce anyone to Barden's techno-logy any more than a thorough knowledge of small intricate mechanisms would introduce a mechanician to the field of electronics. But one cannot delve into basic

electronic theory without hitting some of

the principles of moving machinery. Thomas Barden made his plans. When

the plans were made, he bought tools and parts and went to work, Knowing every factor helped, and not many days passed before he had a working model of his mag-

netic vacuum pump.

He knew where to take it, luckily. He had worked for Terran Manufacturing, Incorporated, and because of his connection there he was not unknown to the chief engineer of Solar Electric. Terran was a small outfit, and though Barden felt that he owed it some loyalty, he felt that the mighty Solar Electric could better afford the price he was prepared to ask. Terran would dig it up-but Solar was prepared at any time for that amount.

And the alien race might not wait-

He was ushered into the office of Hal Weston after an hour of painful waiting. The chief engineer of Solar Electric recognized him with a slight frown.

You're the fellow who took off on Miss

Ward, aren't you?"

"No," smiled Barden. "She happens to be the one that took off on me. I'm still right and I intend to prove it!"

"Not here, I hope. Your card stated

differently.'

"I'm entering nowhere on false pre-tenses, Mr. Weston. My card states my

offer completely."

"You have a means of developing an almost perfect vacuum and simultaneously removing adsorbed gas from any object in the inclosure?"

"Right!"

"Interesting if true. Let's see it."

"I have not the equipment with me. However, I have here a ten-inch glass sphere made from a laboratory flask. In it are several coins, bits of graphite, spongy palladium, and some anhydrous copper sul-This tube was evacuated by my equipment and there was no other treatment for removal of extraneous material.

May we check that?"

"That is why I brought it along-for

your own satisfaction.

Weston spoke into the communicator on his desk and in a minute, the door opened to admit an elderly man in a white coat. Weston gave him the flask and said: "Dr. Grosse, this flask is supposed to be totally evacuated and all absorbed gases removed as well as water vapor. I want a precision quantitative analysis of everything inside of this flask. And," he grinned, "get the results to me by day before yesterday." "Now," said Weston to Barden, "granting

that this is the real goods, how large can it

"It takes about four kilowatts per liter," said Barden. "Since the process takes only about ten seconds, the demand is quite high over a short period. But bearing in mind the four KW per liter, you may make the thing evacuate any volume up to the practical

limit."

"Nothing for a home appliance," laughed Weston. "But if it will drive the spitting devil out of an electron microscope in ten seconds, it's worth it. What are you asking for rights and royalties if it performs as you state?"

"Mr. Weston, I'm interested in one thing only and that is to prove the value of my theory-the one that Edith Ward scorned."

"We're not interested in your theory save

as a theory," said Weston.

"I don't want a position. I want enough immediate money to set up my own laboratory."

"You'll make a lot more if you take a small option now and accept a royalty, you

"I'll sell it outright for five million."

"I'm afraid that we can't settle that

amount in one afternoon."

"That's all right," said Barden. "Get me twenty-five thousand as an option. Then take ten days to build one or to investigate all you want to. If it does not perform, I'll return your money. If it does perform, five million goes.

"Contingent upon Dr. Grosse's findings," said Weston. "And providing that you give me your original equipment in order to save some time in making the initial investigations. I'll have the option agreement and a certified check in this office tomorrow morn-

Barden smiled. "I know what the evacuator will do. I'll be back tomorrow with the

original machine!

Barden's original was an un-neat bit of coils and conducting rods and it looked out of place in Weston's office. But the chief engineer did not mind. He was gloating over the analysis, and checking the report made by one of the mathematical physicists on the theory of the operation of the evacuator.

Both were more than satisfactory.
"You're in, Barden," chuckled Weston
as he countersigned the option agreement.

"Now what do we do?"
"Me?" said Barden. "I'm going to rent me a large empty plant somewhere and start ordering equipment. I may even be back with a couple of other little gadgets later

"If they're as good as this looks right

now, they'll be welcome."

'I'll remember that," said Barden.

Barden's tracks were swift from there on. His first stop was to deposit the check in the bank to the amazement of his teller who felt forced to check the validity of the voucher despite the fact that it was certified. To have Thomas Barden, whose average salary had run about a hundred-fifty per

week suddenly drop twenty-five thousand in the bank was—to the banker's point of

view-slightly irregular

Barden was not able to get out of the bank without having Mr. Coogan, the president of the bank, catch him and ply him with seventeen suggestions as to how the money could be invested. Tom almost had to get insulting before he could leave.

The next month was a harrowing, mad maze of events. He rented an unused factory, complete with machine tools. He hired seven men to help him, and then ran into difficulties because he had to make the equipment to make the machines. He found that starting from complete behind-scratch was a back-breaking job. Daily, the railroad spur dropped a freight car to be unloaded with stuff from one of the leading manufacturers of scientific equipment. The electric company took a sizable bite when they came along the poles with some wristthick cables and terminated it at his plant. He ended up by hiring three more men and putting them to making samples of some of the other by-products, knowing that his money would not last forever. The board of review had mentioned three million, but Barden was beginning to understand that despite all new types of equipment, they were still considering the basic physical laboratory as useful. They were right. It was a lot different starting from an empty factory and taking off from a maintained laboratory.

The days sped by and became weeks. The weeks passed and became months. And as the months worked themselves slowly past, chaos disappeared and order came from

madness.

The by-products of the alien science came swiftly, and they sold well. Money flowed in fast enough to attract attention, and it was gratifying to Tom Barden to read an account 'of his "meteoric rise" that started from the day he "disagreed violently with

the famed Dr. Ward.'

If he had wanted money or fame, here it was. But Barden knew the story behind the story, and he also knew that whoever the alien might be, from whatever system, and adhering to whatever culture, the alien would find no fault in his operations. He had taken the long, hard road compared to the road taken by an accredited scientist producing such a theory. He cursed the delay and knew that it might have cut his time down to a dangerous minimum.

But Tom Barden had become the genius of the age. His factory had grown to a good staff, all but a few of whom worked on the basic science he needed to develop. It was developing slowly, but certainly, and each experiment showed him that the alien mind

had been absolutely correct.

Daily he taught school for an hour. He knew every step, but he wanted his men

to know the art when they were finished; the final experiment made. They would emerge from this trial-without-error period as technicians qualified to work on any phase of the new science. It gave him no small pleasure to know that his outfit would eventually be far ahead of the famous Solar Space Laboratory in techniques pertaining to the art of space travel. He hoped to make Dr. Edith Ward sit quietly down and eat her own words-backwards!

His plans were not published, and the outpourings of by-products seemed high enough to any observer to be the sensible output of the many men working there. None but those who worked there knew that Tom Barden knew every detail of every gadget that hit the various markets, and that the work of making the initial models was not the result of many manhours of experiment, but a few man-hours of building to plans that had been proven and in use.

He was not bothered until the day it was announced that Thomas Barden Laboratories were buying a spacecraft from the

government.

spacecraft was being delivered through the vast back doors of the factory at the same time that Dr. Edith Ward was entering the office doors in front.

Barden met her in his office. "How do you do, Miss Ward."

"How do you do," she returned with extreme politeness.

"May Î ask your business?"

"I am here as a representative of the Solar Space Laboratory.

"Indeed? And what has the government

to say?

Edith Ward slammed her purse down on his desk. "You fool!" she snapped. "Stop it!"

"Don't be upset," he said in an overlysoothing tone that was intended to infuriate. It succeeded.

"You blind fool. You're to stop experimenting in that superspeed drive!

"Am I?"

"Yes," she blazed. "And I have official

orders to stop it."

"Miss Ward, you tried to block me before. You did not succeed. Why do you demand that I stop it?"

"Because it will not work!"

"You've experimented?" "I have not because it is dangerous!"

"Then my knowledge you may have about this science is either guesswork or-feminine intuition?"

"You accused me of that before, re-member?"

"I didn't get away with it then," said Barden. "But I can now. I was unknown then, remember? Well, remember again that I've advanced from unknown a year ago to my present stature now. And I might add that my present stature is not too far below your own, Miss Doctor Ward."

"I have authority to stop you."

Barden looked down at her with a cryptic smile. "Yeah?" he drawled. "Go ahead and try!"

"And do you think I can't?"
"Nope," he said.

"How are you going to stop me?" she blazed.

"I won't have to," he said, "Public opinion will. Don't forget, Miss Ward, that people are still running this system. People are and always have been entirely in favor of the man who came up from nowhere and did things on a big plan. Horatio Alger died a long time ago, Miss Ward, but he's still a popular idea. When you stop me I shall appeal to the people.'

'In what way?'

"You wouldn't be using your feminine jealousy to stall me while the Solar Lab develops the interstellar drive, would you?" "You-!"

"Nah," he warned her blithely. "Mustn't

swear!"

"Oh damn!"

"Now look, Miss Ward," said Barden quietly, "we've had our snarling-session twice. Once when you laughed me out of the Terran Physical Society's big meeting and now when I tell you that I am big enough so that you'll not stop me by merely expressing a personal opinion. Since I'm now big enough to command a little respect in my own right, supposing you give me some of yours and I'll see if I can find any in me to show you. Take the previous as a partial apology if you must. But I'm wanting to know by what basis you state that pursuing this job is dangerous-or say more dangerous than working on high-tension lines or space travel as it now exists."

"The theory you present has one danger factor. According to my own interpreta-tion of your theory, the fields you require in your spacecraft to achieve superspeed are powerful enough to cause a magnetostriction in nonmagnetic materials. This magnetostriction is an atomic magnetostriction which causes the alignment of the planetary planes of the electron orbits. The result is a minor chain fission reaction that becomes major after the first nineteen microseconds."

"My theory is that nothing of that nature

will take place," said Barden.
"Remember," she said, "despite your dislike of me personally, that I am trained in physics. Therefore my interpretation of physical phenomena and my predictions of such are more-"

"I agree," interrupted Barden. "But again do not forget that this is a field that is new to all scientists."

"Agreed again," she said with a slight smile. "But I've had several trained men working on your theory. They agree with

"Don't believe that anyone can formulate an opinion on the material that you

have available."

"Oh, but we can."

"Then you have experimented-"

"No, we have not."

"Then exactly where did you get this extra information?" demanded Barden.

Dr. Edith Ward looked at Tom Barden carefully. "From the same place where you got yours!" she said slowly and deliberately.

Barden wondered, did she know?

He grinned. "I dreamed mine," he said. "Everything that I've produced emanated from a dream." Then Barden embellished it thoroughly, knowing that the flagrance of his embroidery would sound like a lie to anyone who was really unaware of the truth. "I was invaded in a dream by a gentleman who used a mechanical educator on me and taught me everything that I've produced, everything that I've invented, and every advanced theory that I've had. I have become a scientist of an alien culture that I have full intention of making into a solar science."

"Then it is true," she breathed.
"What is true?" he demanded.

"Tom Barden, listen. Not only do I accept your apology of a few moments ago, but I offer mine. I-was afraid. Just as you were afraid to let the truth be known. blustered and took my attitude because I could not let it be known that I, head of the Solar Labs, could be influenced by what the learned men would term either dream or hallucination."

"You've had one too?" he asked quietly.

She nodded.

Tom grunted. "Let's compare notes," he said. "Seems as how we got different stories out of our friends."

Edith nodded again and said: "It was a strange dream that came to me one night about a year and a half ago. I was the soul and master of a mighty castle, an impreg-nable fortress with but five roadways entering. Interpretation of that is simple, of course the five roadways were the five senses. A ... messenger came, but instead of using any of the roadways, he came through the very walls, and warned me."

"Just what was his story?" asked Barden.

"That Sol was a menace to a certain race. This race—never defined nor located save that it was a stellar race—was incapable of conquering Sol excepting by stealth. However it could be done by giving one smart man a partial truth, and that it was more than probable that this would be done. The partial truth was the technique of a new science that would if not used pro-

perly, cause complete destruction of the system. In the final usage, there would be a fission-reaction of whatever planet it was used near. The reaction would create a planetary nova and the almost-instantaneous explosion of the planet would wipe out all life in the system and the counter bombardment of the sun by the exploding planet would cause the sun itself to go nova.

thus completing the process."
"I presume your informant was quite concerned over the possible destruction of a friendly race?"

"Certainly," she said. "That is why he contacted me."

'If I were a member of the conquer-all faction of my story, Miss Ward, I would be trying to contact someone here to warn them of a terrible danger if the science were exploited. That would delay our work long enough for them to arrive, wouldn't

"There is nothing so dangerous as a half-

truth," said Edith Ward flatly.

"Nor as dangerous as a little know-ledge," agreed Barden. "However, Miss Ward, my story is just as valid as yours. And since neither story may be checked for veracity, how do you propose to proceed?"

"I think you'd better stop!"

Barden sat down on the edge of the desk and looked down at her. She was sitting relaxed in the chair alongside, though it was only her body that was relaxed. Her face was tense and her eyes were halfnarrowed as in deep concentration. Barden looked at her for a moment and then smacked a fist into the palm of his hand.

"Look," he said, "that's apparently what your informant wants. Now as to veracity. for every statement you make about the impossibility of interpreting theoretical logic into a complete prediction of physical phenomena without experimental evidence. I can state in your own words that you can't tell anybody what the outcome will be. You want me to stop. If my story is true, then Terra will have interstellar travel and will meet this incoming race on its own terms. Either proposition is O.K.

Edith Ward muttered something and

Barden asked what she said.

"I said that I wondered how many men were too successful in mixing nitroglycerine before they had one smart enough to mail the formula to a friend-before he went up. I also wonder how many men tried Ben Franklin's experiment with the kite andreally got electricity out of the clouds and right through his body and was found slightly electrocuted after the storm had blown over. Number three—novas often occur in places where there seems to be no reason. Could they be caused by races who have just discovered some new source of power? And double-novas? A second

race analyzing the burst and trying their own idea out a few years later?

"My dear young woman," said Barden, "your attitude belies your position. You seem to be telling me not to advance in science. Yet you yourself are head of the Solar Space Laboratory, an institution of considerable renown that is dedicated to the idea of advancement in science. Do you think that your outfit has a corner on brains—that no one should experiment in any line that you do not approve?"
"You are accusing me of egomania," she

retorted.

'That's what it sounds like."

"All right," she snapped. "You've given your views. I'll give mine. You've shown reasons why both your informant and mine would tell their stories in support of your own view. Now admit that I can do the same thing!"

"O.K., ' laughed Barden uproariously, "I

admit it. So what?"

"So what!" she cried furiously. "You'll play with the future of an entire stellar race by rushing in where angels fear to tread!"
"Careful, Miss Ward. Metaphorically.

you've just termed me a fool and yourself an angel."

"You are a fool!"

"O.K., lady, but you're no angel!"

"Mr. Barden," she said icily, "tossing insults will get us nowhere. I've tried to give you my viewpoint. You've given me yours. Now-"

'We're at the same impasse we were a half hour ago. My viewpoint is as valid as yours because there's nobody within a number of light-years that can tell the truth of the matter. You are asking me to suppress a new science. Leonardo Da Vinci was asked to suppress the submarine for the good of the race. He did it so well that we know about the whole affair.'

Meaning?"

"That true suppression would have covered the incident, too. But the submarine was suppressed only until men developed techniques and sciences that made undersea travel practical. If I suppress this science, how long do you think it will be before it is started again by someone else? How did either of our informants get the information?

Why ah—"

"By trying it themselves!" said Barden, banging a fist on the desk for emphasis. "Suppression is strictly ostrich tactics. Miss Ward. You can't avoid anything by hoping that if you don't admit it's there it may go away. It never does. The way to live honorably and safely is to meet every obstacle and every danger as it comes and by facing them, learn how to control them. Shake-speare said that—The slings and arrows of outrageous fortune or nobler in the heart to take arms against a sea of troubles and by facing them, to conquer them!' That may be bum misquote, Miss Ward, but it is true."

"Then you intend to try it out?"

"I most certainly do!"

Edith Ward stood up. "I've nothing more to say. You force me to take action."

"I'm sorry, Miss Ward. If it is battle you want, you'll get it. You'll find it harder to quell Tom Barden The Successful than you found it a year ago when you shut off Tom Barden The Theorist with a word of scorn. I'm sorry—I really am."

"Sorry?" she repeated with disbelief.

"Sure," he said. "Barden Laboratories and Solar Labs could really go places if we weren't fighting. Only one more thing, Miss Ward."

"What?" she replied impatiently.

"Divide and conquer is not uniquely Terran!"

After she left, Barden wondered whether his final shot had hit anything. He returned to work and forgot about it, sensibly admitting that if it did he would not be bothered and if it did not he wouldn't stop anyway, and so he might as well get to work. He rather hoped to avoid the possible delay that would follow official action.

Dr. Edith Ward answered him within twenty-four hours, Her word was accepted as valid in many places; had been the final authority on such matters for some time. Up to now there had never been any defense. Plus the fact that his side of the argument had never been voiced.

Barden didn't scourge the court for their decision. With only one accredited side of the evidence in, they could but take action. So Barden shrugged, grinned to himself, and spent several days in intense study, laying out the program that was to continue in his absence. Then he took the flier for the Terran Capital.

It was not a court hearing. It was more of a high-powered debate before a group of qualified judges and investigators. Barden looked into the background of his judges and was glad that the old system of appointment to investigating committees had been stopped. Though these men were not qualified physicists, they were not the old-line politician, who took an arbitrary stand because he thought that waving a banner with a certain device would sound good to his constituents. There would be little personal opinion or personal ambition in this hearing, and not one of the judges would sacrifice either contestant on the altar of publicity.

By unspoken agreement, neither he nor Edith Ward mentioned the source of their information. This Barden admitted was hard on the female physicist's argument for she could claim only mathematical analysis and he could claim experimental evidence.

They heard her side and then asked for

his. He gave his arguments simply and answered every point she brought up. There was rebuttal and rejoinder and finally open discussion.

"I claim that this man is not a qualified physicist," she stated firmly. "As such he has not the experience necessary to judge the validity of my argument."

"I admit that I hold no degrees," said Barden. "Neither did Thomas Edison. Is Miss Ward convinced that no man without a string of college degrees is qualified to do anything but dig ditches?"

That hurt, for the investigators were not blessed with doctor's degrees in philosophy; the scattering of LL.Ds were about half honorary degrees and their owners though gratified for the honor knew how it was earned.

"Of course not," snapped Miss Ward. "I

merely state-"

"If Miss Ward is so firm in her belief, why doesn't she bring forth some experimental evidence. She has the entire holdings of the Solar Space Laboratory at her disposal. If this is as important as she claims, then the financial argument may be dispensed with. For no amount of money is capable of paying for total destruction of the solar system."

"I need no experiments," she snapped.
"Or is Miss Ward trying to tell us that any line of research that she does not sponsor is not worth bothering with? Or is she trying to stop me so that she can take up? Or has she started—late—and wants me stopped before I get to the answer. That would make the famous Solar Space Laboratory look slightly second-rate, wouldn't it."

"Gentlemen," cried Miss Ward facing the committee and ignoring Barden, "his statements are invidious. He is accusing me of jealousy, personal ambition, and egomania. This is not fair!"

"Miss Ward, I regret that you are not a man—or that I am not a woman. Then we would have an even chance before a com-

mittee of our contemporaries."

"Mr. Barden," she said in an icy voice, "I've been accused of flaunting my sex every time a question is raised. I've also been told by many that my position was gained in the same way. Just because I prefer to be a physicist instead of some man's housekeeper, I am viewed with suspicion, hatred, jealousy, and dislike. Well, Mr. Barden, you accuse me of using my sex. It is as much a hindrance as an aid, because I find that a woman has to be three times as good as the man in the same job in order to get the same recognition. If she isn't, nobody trusts her at all! Now," she said facing the committee, "I'll make my final plea. I've had mathematical physicists at work for almost a year. They agree with me. Thomas Barden has earned his position, I admit. But I still claim that he is moving forward along an

unknown road because he is unable to make the necessary predictions. I've explained where this road leads to, and the consequences of following it blindly. He must

be stopped!"

"Mathematics," said Barden, "and I quote Dr. Murdoch of the Board of Review of the Terran Physical Society: 'And may I add that when mathematics and experiment do not agree, it is the math that is changed. As witness Galileo's experiments with the falling bodies.' No one can make a certain prediction postulated on mathematics unless he has cognizance of every term. Miss Ward, are you aware of every factor?"

"No but-

"Then your mathematics is faulty. And your opinion is, therefore, reduced to a personal opinion and not a scientific statement of fact. I've heard that a physicist is a learned one who leaps from an unfounded opinion to a foregone conclusion."

"You sound like an orator," snapped Edith Ward, "and orators seldom follow full fact unless it enhances their point."

"I'm sorry that you have that opinion," said Barden. "However, Miss Ward and gentlemen, regardless of what you do, of how you attempt to restrain me, I shall pursue this matter to the bitter end. If you deny me the right to work on Terra or any other solid body of the system, I shall take my laboratory into space and then we shall have two space laboratories—one of which will function in the medium for which it was named!"

Barden nodded affably, turned, and left

the room.

One of the committeemen smiled sardonically and said: "I think he has just said, 'To Hell with us'!"

Another one nodded glumly and said: "Me, I think he's right. No one can stand in

the way of progress.

Edith Ward blazed. "Progress! Progress! Is destruction progress? Well, if the ultimate goal of mankind is to go out in a blazing holocaust of his own making, then this is true progress. One proper step toward the final Gotterdammerung!"

The committeeman smiled at her tolerantly. "Twilight of the Gods, Miss Ward? Oh come now, we aren't gods and I daresay that the universe will continue to function

without man's aid and abetment.

Edith Ward snorted through her patrician nose. "Correct," she snapped. "But after we leave, who's here to care?

Dr. Edith Ward was surprised by his arrival at the Solar Space Laboratory. She didn't expect him. He had won his battle, and she knew he was not the kind of man to gloat over a defeated enemy. Therefore she reasoned that she might never see him again for certainly she would not go to his place to see him—and eventually the whole

system would go up, triggered by the untrained hand of Thomas Barden.

Then to have him call—it bothered her.

Whv—?

He entered, carrying a small olive branch, and he smiled boyishly as he handed it to her with a small bow.

A truce," he suggested.

"There can be no truce," she said stonily. "It will either be you or me that is shown

"Oh, I wouldn't say that," he said with a smile, "Look, Miss Ward, I've never disregarded the possibility that you might be correct. All I've wanted was a chance to prove it instead of merely writing it off on the grounds of possible danger. One never knows what will happen until one tries. Therefore I wanted to continue. I've completed the ship and it is awaiting a trial. Any time we're ready.

'Is this a last attempt at mollification—a salving of your somewhat rusty conscience?"
"Not at all," he said. "I want you to go

along with me as a qualified observer.

To observe what? Terra going up in

flames?"

"Nope. Not necessary. The ship still retains its normal drive. We'll take it out beyond the orbit of Pluto by a couple of billion miles and let it go out there. I daresay that if you are correct, the fury of a few hundred tons of spacecraft going up in sheer energy will not damage the solar system much. Especially from that distance. Then if it does run, we're also on our way to one of the nearby stars. Like?'

'Sounds reasonable."

"Certainly," he said. "Frankly I've considered that ever since you mentioned the

"I wonder if my informant considered it,

too?" she said slowly.

"Probably."

"Then his warning was truly helpful." "Iffen and providen again," he grinned. "But if he is so nicely altruistic, why didn't he tell us how to get a real superspeed drive?"

"Maybe there is none."
"Then," said Barden, "why knock out a solar system that is so far away that nothing

it does can have any effect upon you?"
"A very valid point," said Edith Ward. Her eyes opened wide and her jaw fell slack.

Goodness," she breathed.
"Are we?" he asked hollowly. His expres-

sion was one of wonder and amazement.
"Well, if we win and it works, they've hazarded nothing and still have their science. If we lose, they will not miss us in the first place and also they'll quickly abandon that point."

"Guinea pigs," snorted Edith. She stood up and put one slim hand in his. She gave it a hearty shake and a firm grasp. "I'm infrom right now to the point where the whole cosmos goes up in a cloud of nuclear particles! I'll be at your place in the morning with my case packed for a six months' trip. Now I'm getting a whole case of feminine curiosity!"
"Yes?" he said cheerfully. "What, this

"Well, if your informant was tossing us an experiment, hoping to get an answer, then why did mine warn me? They'll never see a spaceship burst at a distance of a half dozen light-years. They might never really know.

"We'll find out," he said firmly. "There is something about both sides that I do not

like!"

True to her word, Edith Ward turned up at the first glimmer of daylight with her case of personal belongings. "Where'll I have it put?" she asked.

"Ship Two, Stateroom Three," he said. "I have two crates fixed up so that if you're right, we can still get home without taking

to the lifecraft.

One hour later, the two ships lifted on their ordinary space drive and sped with constant acceleration directly away from the sun. At three times gravity they went, and as the seconds and the minutes and the hours passed, their velocity mounted upward. In both ships, the men worked quietly on their instruments, loafed noisily, and generally killed time. Everything had been triply checked by the time that turnover came, six days after the start. Then for six more days the ships decelerated at three gravities while the sun dwindled in size. Between Tom Barden and Edith there was much talk, but no solution to the problem. They covered nearly all aspects of the possibilities and came up with the same result: Insufficient evidence to support any postulate.

About the only thing that came to complete agreement was the statement that there was more to this than was clear, and it was

suspicious.

The feud that had existed faded away. It may have been the common interest, or if you will, the common menace. For though no true menace had shown, it was a commonbond between Barden and Ward against a question that annoyed them simultaneously. It may have been simply the fact that man and woman find it hard to continue a dislike when they have something in common. Nature seems to have made it so. It may have been the thrill of adventure, prosaic as it was to be racing through unchangeable space for hour upon hour and day upon day with nothing but the sheerest of boredom outside of the ship. Perhaps it might have been that the sight out of any window was exactly the same today as it was yesterday and would be tomorrow or a hundred years from now—or even a thousand, for though the stars do move in their separate paths, the constellations are not materially different. The utter constancy of the sky without may have turned them inward to seek the changing play of personality.

Regardless of the reason, by the time they reached that unmarked spot outside of the orbit of Pluto where the ships became close to motionless with respect to Sol-there was no way of telling true zero-relative motion and true zero was not important anyway-they were friends.

The ships were rather closer together than they'd anticipated, and it took only a couple of hours of juggling to bring them together. Then the skeleton crew of the one was transferred to the other ship. It drew away

and away and away.

"We've got more radio equipment aboard these crates than the Interplanetary Network owns," grinned Barden. "Everything on the darned crate is controlled and every meter. instrument, and dingbat aboard her will ship the answer back here. There must be a million radio-controlled synchros aboard these ships, and cameras on both to read every factor.

"That's fine," answered Edith with a smile. "What happens if it works like a charm and takes off at superspeed? How do your radio-controlled gadgets work then?"

"We'd lose the ship, of course, if we didn't have a time clock on the drive. If all goes well, the first drive will run for exactly ten seconds. Then we'll have about a ten-day flight to find it again because it will be a long way from here—straight out!" He smiled. "Of course, if we want to take a small chance, we could turn it on its own primary drive and superspeed it back if all goes well. But the radio controls will be as sluggish as the devil because there should be about a three or four hour transmission delay."

The other ship was a minute speck in the distance. Then a ship-alarm rang and the entire crew came to the alert. Barden said: "This is it!" in a strained voice and he pulled the big switch.

Along the wall was the bank upon bank of synchrometers, reading every possible factor in the controlled ship. Before the panel were trained technicians, each with a desk full of controls. Behind them were the directors with the master controls, and behind them stood Barden and Edith Ward. From holes above peeked the lenses of cameras recording the motions of every technician, and behind the entire group, more cameras pointed at the vast-master The recorders took down every sound, and the entire proceeding was synchronized by crystal-controlled clocks running from a primary standard of frequency.

At the starting impulse, the warm-up time pilot lit and the relays clicked as one, like a single, sharp chord of music. When the

warm-up period ended the pilot changed from red to green and another bank of relays crashed home with a flowing roar, each tiny click adding to the thunder of thousands of others like it.

'That's the end of the rattle," observed Barden. "From here on in we're running on multicircuit thyratrons."

The meter panel flashed along its entire length as the myriad of Ready lights went on. The automatic starter began its cycle, and the synchrometers on the vast panel began to indicate. Up climbed the power, storing itself in the vast reservoir bit by bit like the slow, inexorable winding of a mighty clock spring. Up it went, and the meters moved just above the limit of perception, mounting and passing toward the red mark that indicated the critical point.

As slow as their climb was, each meter hit the red mark at the same instant.

There was a murmur of low voices as each technician gave his notes to the recorders. No scribbling here, the voice itself with its inflection, its ejaculation, and its personal opinion under stress would be set down.

Then the master switch went home with a tiny flare of ionized gases-

And silently every panel went dead.

"Oh!" said Edith Ward in a solemn tone. "Not yet," Barden objected. "This may be success.

But-?"

"How do you hope to control a radiocontrolled drone that is traveling higher than the velocity of propagation?"

But how will you ever know?"

"When we-

He was interrupted by the chatter of the radiation counter. Light splashed in through the tiny ports in a brilliant flare.

"Well, we won't," said Barden helplessly.

"Won't what?"

"Ever catch up with it! Not where it's gone!"

"So---?"

"So we've solved that problem," he said bitterly. "Your informant was right. From what the counter says, that was a vicious number. Well, I guess I am licked, finally. I admit it."

'Somehow," said Edith solemnly, know I should feel elated. But I am not. Fact of the matter is, I am ashamed that there is a portion of my brain that tells me that I am proven correct. I... fervently wish it were not so.'

"Thanks," he said. "I wish but one thing." "What?"

"I'd have preferred to have been aboard that crate!

"Tom," she said plaintively. "Not-

oblivion.

"No," he said with a wistful smile. "At superspeed, my recording instruments could record nothing. Perhaps if I'd been aboard I could have found out what really happened. There is no way.

"But what can we do?"

"Build another one and spend my time trying to find out how to get a recording from a body that isn't really existent in this space at all."

That sounds impossible."

"Then there is but one answer," he said, "and that is to go out with it and hope that by some machination I can control the reaction before it gets beyond stopping.

"Tom," she said quietly, "you are still convinced that such a thing is possible?"

"I am," he said. And then he stopped as his face filled with wonder.

"What?" she asked, seeing the change.
"Look," he said, his voice rising in excitement. "We caught radiation. Right?"

'Right." "That means that the ship was not exceeding the velocity of light when it went

'Yes, but-?"

"Then on the instantaneous recorders there must be a complete record of what every instrument should have been reading but did not due to the mechanical inertia of these meters! Right?'

But suppose-

"Look, Edith. The theory of the drive is based upon the development of a monopolar magnetic field that incloses space in upon itself like a blister, twisted off from the skin of a toy balloon. Now that field would collapse if the fission started, because the fission is initiated as you claim by magnetostrictive alignment of the planetary orbits of the field-electrons in the atoms. Obviously the magnetostrictive effect is more pronounced near to the center of the monopolar generator. Ergo that would go first, dropping the speed of the ship to below the velocity of light by considerable an amount. Then as the fission continued, spreading outward, the various instruments would go blooey-but not until they'd had did you say thirteen microseconds after initiation the major fission took place?" "Yes.

"Give it twelve microseconds to drop the ship below the speed of light and I have still one full microsecond for recordings!"

Edith Ward looked up in admiration. "And you'll bet your life on what your instruments can see in one millionth of a second?"

"Shucks," he grinned. "Way way back they used microsecond pulses to range aircraft, and they got to the point where a microsecond of time could be accurately split into several million parts of its own. Besides, I made those instruments!"

"Q.E.D." said Edith Ward quietly. "But how are you going to develop a monopolar

magnetic field without the magnetostrictive effect? The prime consideration is not the field, but the fact that aligning the planetary orbits means that two things tend to occupy the same place at the same time. That isn't—they tell me—possible."

"Too bad the reverse isn't true," he said. "You mean the chance of something occupying two places at the same time?'

"Uh-huh." "What then?"

"Then we could develop two monopolar fields of opposing polarity to inclose the twin-ship proposition. Then the atomic orbits would not be affected since they would receive the bipolar urge."

"Couldn't you change from one to the

other very swiftly?"

"Not without passing through zero on the way. Every time we passed through zero we'd end up at sub-speed. The ship would really jack rabbit." "Oh."

"But," he said thoughtfully, "what hap-pens if the monopolar field is generated upon a true square wave?"

"A true square wave is impractical."

"You mean because at the moment of transition, the wave front must assume, simultaneously, all values between zero and maximum?"

"Yes," she said, "and it is impossible to have any item operating under two values."

"That is an existent item," said Barden with a smile, "Bringing back H. G. Wells' famous point of whether an instantaneous cube could exist."

"This I do not follow."

"Look, Edith," said Tom patiently. "Any true square wave must have a wave front in which the rise is instantaneous, and assuming all values between zero maximum for the duration of an instant. An instant is the true zerotime, with a time-quantum of nothing—the indivisible line that divides two adjoining events. Just as a true dine has no thickness.
"Now," he went on, "generating the

monopolar field on a true square wave would flop us from one field to the other in true no-time. At that instant, we would be existing in all values from maximum negative to maximum positive, at the same time at zero-but not truly assigned a real

value. Therefore we should not stop.
"However," he went on, "that is an impossibility because the true instant of no duration is impossible to achieve with any mechanism, electrical or otherwise. How-ever, the fields set up to make possible this square wave do permit the full realization of the problem. For a practical duration, however small, the value of the wave does actually assume all values from maximum negative to maximum positive!"

She looked at him with puzzlement. "I thought they taught you only this one science," she said.

"That would have been useless," he grinned. "As useless as trying to teach a Hottentot the full science of electronics without giving him the rest of physics as a basis. No, little lady, I got the full curriculum, including a full training in how to think logically! How else?"

"You win," she said solemnly. "Fudge up your true square wave, and I'll buy a

ticket back home in your crate!"
"Thanks, Edith," he said, "that's a high compliment. But there's more of us than we-all. I'll have to take a vote.'

There was a roar at Barden's explanation. And his head technician stood up, waving for silence. "There's enough lifecraft aboard," he shouted over the noise. "Anybody who wants to get out can take 'em. They can make Terra from here in a couple of months in a lifecraft if they want to."

That got a roar of approval.

"Lucky I had two ships all fitted out," said Tom. "Also, with all this spare junk for radio-controlling the other crate we've got a shipload of spare parts. Probably take about a week flat to tinker it together, but it is far better to do it out here than to go all the way home to Terra-that'd take about four weeks.

"I wonder why they didn't think of that

square-wave idea," said Edith.

'Lord only knows."

"That's what bothers me," she said.

"Why?"

"Because we are playing with the other man's cards, remember. We're not leading authorities in this art. You got both the square-wave generator and the monopolar field out of them. Now why hadn't they tried it before?"

"On the theory that no beginner ever has a valid idea. No soap, Maybe they've been too close to the woods to see anything but them trees. Of course, there's another little angle we've not considered.'

"Go on. First it was a political difference between factions for and against subjugation. Then I came in and threw in my two cents which sort of hardened the argument a bit. We didn't know whether my stuff was shoved in to stop production or to save Sol. We know now that your informant was telling the truth but not the whole truth. We know that mine was honest but not why he was. Then we came to the possibility that someone somewhere tossed us a fish because they were afraid to try it. Why the stopper on that?"

"Possibly they want us to really fry it out and not total destruction."

"Look, Edith. Supposing you wanted to have something developed for you by a consulting laboratory. You've done that yourself at Solar Labs. Wouldn't you give them whatever information you had avail-

able?

She nodded, "Nice explanation," she said solemnly. "Excepting that if I were doing it, I'd not call one man and start him experimenting on one pretext and then call another member of the laboratory and tell him that the information would lead to disaster.

"In other words, the big problem is

motive.

"Precisely. And that's what we're up against. Try to figure out the hidden motives of extra-solar cultures."

"You believe there are two?"
Tom Barden nodded, "Uh-huh," he said. "And all the talking we can do from now until we find out won't help because we cannot interpret the thoughts of an alien culture in our own terms and hope to come out right!"

And that, of course, was that. It was definitely true. Reviewing all the evidence during the next ten days, they came up with a startlingly minute amount of fact. Barden had been given a scientific field because of a political argument; Edith Ward had been warned that the information was incomplete and would lead to

disaster. Build upon those slender bricks and they tumble all too quickly, Barden's story could be construed as an attempt to get consulting service on a dangerous project without danger to the alien race. Ward's informant might have been an attempt to give Sol a good chance to solve it in safety, but in solution there would be no proofor even in failure. For there was no way of telling proof from failure at many lightyears of distance unless the failure bloomed the entire system into a nova.

And regardless of any theoretical argument, it was still a technical impossibility to construct any spaceship capable of tra-versing light-years without some means of super speed. Not without a suitable crew

to do a job when it arrived.

Then, to reverse the argument, supposing that Barden's tale was correct. The opposing faction might hope to forestall any work by issuing the warning.

But if Barden's tale were correct, why did the so-called altruists offer him a science that was dangerous to pursue?

Unless, perhaps, the political argument was conquest versus dominance. factions wanted conquest and dominance. One demanded the elimination of all races that might offer trouble. The other faction might argue that a completely dead enemy offers no real reward for conquest—for of what use is it to become king when the throne is safe only when all subjects are

Yes, there's Paranoia. The paranoid will either become king of all or king of none

or none will remain to be king including himself. That theory is quite hard on rational people.

So went the arguments, and when the ten days were completed, they were no closer to the truth than they had been

before.

Not entirely true, that. For they hoped to drive-somewhere-at a velocity higher than the speed of light.

With a firm hand, Tom Barden pressed the Start button. The relays clicked and the pilot lights flared red, and then after the warm-up period they turned green.
"This is it," he said, grasping the small

lever that would start the automatic

sequence.

Silence—almost silence came. From one corner came a small muttering and the click of beads. A throat was cleared unnecessarily, for it, like all others, was both dry and clear. A foot shuffled nervously-

'No!" shouted a voice. Barden looked at Edith Ward, "Still-?"

he said.

She nodded and put her hand over his on the lever. "Want me to prove it?" she

said, pushing it home.

There was a tinnily musical note that crept up the scale from somewhere in the sub-audible, up through the audible scale and into the shrilling tones that hurt the ear. It was hard to really tell when it passed above the audible, for the imagination followed it for seconds after the ear ceased to function.

There was a creak that rang throughout the ship. A tiny cricket-voice that came once and changed nothing but to increase

the feel of tenseness.

Then—nothing pertinent.

Except-

"Great Scott! Look at Sol!"

The already-tiny sun was dwindling visibly; it took less than three or four seconds for Sol's disk to diminish from visible to complete ambiguity against the curtain of the stars.

"We're in!" exploded Barden.

"Hey!" screamed a watcher at the side port. A flare whisked by, illuminating the scene like a photoflash bulb. A second sun, passed at planetary distance. It joined the starry background behind.

Barden shut off the drive and the tense

feeling stopped.

"Well, we're in!" he said in elation.

"We're in!"

The scanning room went wild. They gave voice to their feelings in a yell of sheer exuberance and then started pounding one another on the back. Barden chinned himself on a cross-brace and then grabbed Edith Ward about the waist and danced her in a whirling step across the floor. The crew caught up with them; separating them. They piled into Barden, ruffling his hair and rough-housing him until he went off his feet, after which someone produced a blanket and tossed him until the blanket ripped across. Then they carried him to the desk and set him unceremoniously across it, face down, and left him there to catch

"Like New Year's Eve," he grunted. The crowd opened to let Edith through. She came toward the desk as Tom unraveled himself and sat on the top. "A fine bunch of wolves," she chuckled gleefully. "Tom, have you ever been kissed by twenty-two men?"

"Wouldn't care for it," he said. "They're not my type. And besides, it's twenty-three." He made the correction himself.

Then things calmed down. They were-as one man put it—"a long way from

home!"

"But what I want to know is why we can see the sun when we're going away from it at several times the velocity of light?"

demanded Tom.

Well, your own problem answers your own question," said Edith, patting her hair back into place. "Remember the square-wave problem? Well, in the transition-period, you are simultaneously obtaining all degrees from maximum negative to maximum positive including zero. Zero is where the ship, being out of space-warp, must drop below the speed of light. The sun receding is due to the persistence of vision that lasts between transition periods. Lord only knows how far we travel between each transition.'

"We can find out," said Tom. "I'd hoped to develop a velocimeter by using the doppler effect, but that's not possible, I guess. I'd suggest that we find out where we are then head back for Sol. Might as well get for home and start the real thing cooking."

"What was that sun we passed?"
"I'll not tell you now," said Tom. "One of the nearby stars but I don't know which. We might stop though, and take a closer look at an alien star from close up."

The ship was turned and the drive was applied until the star expanded into a true sun. At about a billion miles, they stopped to inspect it sketchily. They were not equipped to make any careful observations of stellar data.

They watched it like sightseers viewing Niagara Falls for an hour. There was really nothing to see that could not be taken in at a glance, but the idea of being near to one of the extrasolar systems was gratifying in

itself.

Then, as the realization that they could watch that silently blazing star for years without producing anything of interest or value, Barden called a halt to the selfhypnosis and they resumed their stations.

The drive was applied again, and they passed the star, picking up speed as they went.

Somewhere ahead was Sol, lost in the starry curtain of the sky. But they were not lost, for they were headed in roughly the right direction and eventually Sol would emerge and stand out before them in plenty of time to correct their course.

The entire group, their period of strain over, stood idly looking out of the ports. There was nothing to see save that star, passing into the background. But their work was finished and they were loafing. It looked like an excellent time to just stand and do nothing. Barden was inspecting the superdrive unit with a paternal smile, noting with some gratification that it was even smaller than the normal driving gear of the ship. Dr. Edith Ward had gone to her room to repair the damage done during the cele-bration. Jerry Brandt, the manual pilot, was sitting idly, playing a senseless game with the myriad of switches on his disconnected board as the autopilot controlled the ship.

Two of the crew were matching pennies in front of the meter panel, and three more were watching a chess game between two of the others who were using various-shaped radio tubes as men. All was set for a quiet

journey home.

Their first alien sun dwindled and was soon lost. Before them, the stars were immobile until one at near center swelled visibly. Jerry Brandt idly kicked his switches into neutral and switched over to manual drive long enough to correct the course; the swelling star and the rest of the sky swiveled about the ship until Sol was on the crosshairs.

This time there were no days of flight from Terra to beyond-Pluto. Their ship plunged sunward at a dangerous pace, dropping below the speed of light at the tick of an instant at about the orbit of Jupiter. At under the speed of light but far above the normal speeds of spacecraft, the ship headed Terraward, and slowed as it went. The super-drive was turned off a few thousand miles above Terra and the rest of the voyage to the surface of the planet took actually longer than the quick run across interstellar space.

They landed in the huge construction yard

at the Barden Laboratories. A success-

"Yeah," said Tom Barden dryly. "A success. But who did what to whom and why?"

Edith Ward nodded in puzzlement. "You don't suppose it was just some nearby star wanting to observe a nova at close

proximity?"

"Seems to me that wouldn't tell 'em anything," said Barden. "That would be a completely artificial nova and lacking of true data. Of course, I'm no astronomer and don't know beans about the subject at all.

I admit it. I'd be lost trying to find my way home from out there if I couldn't retrace my steps. I wouldn't recognize Sol from Sirius if I were on Arcturus, and I'd not know how to go about it.

Spectral lines, and stellar data-" said

Edith.

'I have a hunch that whoever—in fact I'm certain—gave me this information was uncertain as to whether I was in the next stellar system or halfway across the universe.

"That would depend upon the range of whatever gadget they used to implant the information—and whether it were beamed. Also, Tom, there's another interesting item. You say there was a mental conversation in your case. That means that the velocity of propagation of that medium is instantaneous! Either that or he was right here on

Got me. But if he were right here, why didn't he meet me in person, or make a

future date?'

"I pass," said Edith, "I have a fair working knowledge of astrogation. I wonder if it is complete enough for my fellow to have positioned us. On the other hand, mine came strictly as information without chitchat. Like someone handing me a telegram full of

Barden considered the problem a moment

as the girl went on.

"But my knowledge of astrogation is merely the angular constants of the Marker-Stars and how to recognize them from their constellation-positions. He might be able to set up a model of this hunk of sky and reach the right answer—only if he sought the information, however. I did not give it, and he seemed uninterested—as I say, it was like getting a phonograph record or a radiogram.

They entered Barden's office and as they did, Tim Evans came running in Barden nodded and said: "Miss Ward, this is Tim Evans, my head mathematical physicist. Tim,

this is Dr. Ward."

They acknowledged the introduction, but Tim was excited, "Look, Tom, did it work?"

"We had trouble on Ship One but we fudged Two up and made it sing like an angel." Barden explained sketchily.

Oh," said Evans, his face falling slightly.

"Why?"

"Because I've been thinking along another line and I've come up with another kind of superdrive. If yours didn't work, this one is certain.

"Yes? Go on."

"No need to," said Evans. "Yours is far more efficient and less bulky. Mine would get you there but it would take up a lot of extra space. Besides, it doesn't offer the chance to see where you're going directly, but only through a new type of celestial globe. Furthermore, it wouldn't move as fast. So, forget it."
"New type of celestial globe?" asked

Barden. "We could use it, maybe. We can see out all right, but that's due to the intermittence. The present celestial globe system is an adaptation of the pulse-ranging transmission-time presentation, you know. When you're running above light the globe is useless.

"But look, Tom," objected Edith, "You won't need one at superspeed. You'll not be maneuvering, and if you hit something a few million miles ahead in the globe, you're past it before anything could work anyway."

'Admitted," he said. "But I'd like to have one, anyway. Look, Evans, how does this thing work?"

"On a magneto-gravitic principle. Gravity, I am beginning to understand, is not a matter of wave propagation at all. It is a factor of matter-and it is either there or it isn't"

'I wouldn't know."

"Well, that's the theory. So we utilize an artificial manifestation of gravity, beamed. It also seems that gravitational effects are mutual. In other words, the attraction between Terra and Sol is the combination of mutual attractions. So our beam, increasing the attraction between the object and the beam also causes the increase of the attrac tion between the beam and the object. For beam read transmitter; I always think of the radiating element as being the beam instead of what I should. Anyway, when the attraction is increased, it affects a detector in the radiating elements. That gives you your indication.

'How about ranging."

"Still a matter of the inverse-square of the distance. We know accurately the attraction-factor of our beam. Whatever reflects will have distance-diminishment which we can measure and use."

"But it is also proportional to the mass,

isn't it?" asked Barden.

"It'll take a nice bunch of circuits," grinned Evans, "but we can check the mass with another beam's attraction to it and differentiate. An integrating system will solve for range on the basis of mass and distance. The celestial search and presentation systems will be the same.'

"O.K.—how about communications?"
"Sure," said Evans.

"You rig 'em up," said Barden. "And Tim, tell Eddie to refurbish the ship. We're going out again. And I want three or four of the original space drives put aboard as working spares."

"Working spares?" asked Evans.

"Yeah, mount 'em on girder-frameworks complete with atomic units. I'm going to prove the next point.

"What next point?" asked Dr. Edith

Ward.

"I want to find out if your informant was telling the truth," said Tom Barden.
"Interested?" Edith shuddered a little. "That's a big responsibility," she said. "You intend to

destroy a whole stellar system?"

"I don't know. I'm going to see whether that stuff would actually start an overall sustaining fission reaction in a planet after the minor fission got under way. If it does, then it is no worse for me to blow up a dead system than it would be for my little informant getting us to blow up ours."

"You sound rather positive about it."
"One or the other," said Barden. "I'm bothered. No matter how you look at it, we or I, was like a small child given matches to play with in a nitrocellulose storehouse. Unless you'd come up with yours, I'd have most certainly blown us sky high.

"Right. I think we owe my friends a debt

of gratitude."

"I'll agree to that. But for this test, we'll ramble until we find a relatively unimportant star with only one or two planets, devoid of life. Then we'll try it."

"But even with dead system, you're taking

a lot upon yourself."

"How?"

"There will, from that time on, be a monument to the memory of Thomas Barden. You'll be the object of argument and of both admiration and hatred. Flagwavers will either point with pride or view with alarm, depending upon their politics. Why not wait until the thing is discussed?'

"Forever? No, Edith. None of us can afford it. We must know. If this works, Sol has a rather dangerous weapon against any possible conquesting races in the galaxy. Regardless of what has gone before, Sol is in a position to go out and make her mark upon the galaxy. It is best to go prepared, and if we fear nothing, we neither need fear subjugation.

"But destroying a stellar system—"
"Who'll miss it?" he asked.
She looked blank. "I don't know," she said. "It just seems so big. It doesn't seem right that one man should be able to go out and destroy a stellar system. One that has been stable for million upon million of years. Superstition. perhaps," she thoughtfully. "I'm not a religious woman, Tom. I am not sacrilegious, either. Somehow, somewhere, there must be a God-

"Who made the universe. With a density of ten to the minus twenty-eighth power and an average temperature of matter about twenty million degrees? For the benefit of Terrans. Well if so, Edith, He is willing to see one of His experiments used to further mankind in his struggle. Ad astra per aspera,

my dear!

Edith agreed solemnly but was obviously

unconvinced.

"Look," he hastened to add, "if all this was put here for the benefit of Terrans, we're expected to use it. If we are incidental in some grand plan encompassing a billion suns in a thousand galaxies, loss of one sun won't matter."

"I suppose that's logic," she said, "I'd prefer not to talk about it too much. I know it should be done, but it still seems

all wrong somehow."

"We've got to know. Remember there's a lot of truth in the whole thing," he said thoughtfully. "And also a lot of untruth. They did tell me the way to interstellar travel—in a slightly slaunchwise fashion. They told you about the disintegrationprocess. Now, darn it, Edith, did they scare us away from planetary tries because they knew it would damage the system or for another reason? How do we know the thing would ruin a planet and ultimately the system? Answer, we do not."

She nodded glumly. "I supopse that it is

a step toward the final solution."

"Right, and as soon as we can get a nice system, we'll try it!"

"This is Procyon," said Tom Barden. "Or so they tell me. I wouldn't know."

The star was a small disk almost dead ahead; its light shone down through the fore dome of the ship augmenting the lights in the observation room.

"Sentiment again," she said. "I'd prefer a system more distant."

"If this has the right kind of planets, Procyon it is," said Barden flatly. "If it has planets unsuited for life, what possible good can it do Terra? Plus the fact that the instability that follows the nova for a few years will act as a nice signpost toward Terra from all parts of the galaxy. Re-member, men will really be spreading out with the new drive."

"Again you're right. But have you no sentiment?"

He looked at her. "Not when it inter-

feres with practicality-"

They were coasting along at half the speed of light, under the super-drive. On all sides were running cameras. One coast across the system with the moving picture cameras covering the sky would bring any planets into ken; the parallax of planetary bodies would show against the fairly constant sky. There was also visual observation for interest's sake.

At the far side, the ship came to a stop with respect to Procyon, and while the films were developing, Jerry Brandt swapped ends and ran the ship nearer the center of the system. Procyon, from one side port, looked about as large as Sol from Terra and it seemed about as bright and warm.

It was here that they met the alien ship. It came from nowhere and passed them slantwise at a terrific velocity. As it passed, stabbing beam darted once, and the beam-end burst into a coruscation of sheer

energy.

"That," blubbered Barden, "was close!"
Jerry Brandt swore thoroughly, and whipped the ship around slightly, cramming on the super-drive but keeping the drivers below the speed of light. He set his switches carefully, and seconds later the alien ship appeared for one brief instant and then was gone. While it was there, eye-visible in the sky, one of the ship's own cutting planes sheared out and sliced the driving tubes from the bottom of the ship.

Then it was gone and Brandt fought the

switches, stopping the ship. "What-was that?"

"We've got a nice way of retaliating," said Barden harshly. "We use the intermittent generator of the superdrive but we stay below the velocity of light. Jerry has calibrated the intermittence and the rep-rate to a nice precision. We appear in true space, slash out, and disappear again to reappear God knows how many miles farther on. Now we'll go back and see whether that bird wants more." He spoke to Jerry: "Take care!"

"Easy she goes," replied Brandt. "Did you see that joker? He tried to ruin us!"

They came up as the inert alien came into view. It stabbed again with that beam but missed. Jerry Brandt swore again and cut the ship from end to end with his cutting plane. This time there was no response save a swirl of smoke from the cleft sides of the ship.

"We've used these to cut asteroids into stove lengths," he told Barden sharply. "I wonder how many of them have been used

likewise on some hapless enemy.'

"I don't have any way of knowing," said Barden. "And I don't care whether it is a proper weapon to use or not. It worked."
"What are you going to do?" asked Dr.

Ward.

He smiled at her. "He didn't like usapparently for no reason than we were alien. If he'd come in peaceable, we'd have made talky-talk. As it is, he fired first but not too well. Now we'll just grab his ship and see what he's got, who he is, where he's from—and possibly why."

It was a small ship outside, in space.

But getting it into the vast cargo-hold of Barden's ship required some more trimming. The alien ship finally lay in eight sections, stacked. The cargo hold was now jammed with alien ship and much of the spare equipment and supplies were jettisoned.

Then they went in warily to examine the alien. They found the alien crew-four of them. They were spacesuited but uncon-

'Hope they breathe air at twenty per cent growled Barden. They opened the oxygen," suits and laid the unconscious aliens on tables in one of the operations rooms.

They were squat and wide, almost humanoid save for large eyeballs under the closed double lids. Their noses were almost nonexistent, and each hand splayed wide with seven stubby fingers. These hands were symmetrical, but despite a thumb on either side, the Terrans doubted that they were more dextrous than Terrans because of their shorter fingers.

Their shoulders were very wide, but also quite thin, indicating a long, unfavorable

leverage with less muscle.

"Ugly looking--" started Jerry Brandt, who shut himself off as he remembered

Edith Ward.

She looked up at him and flushed. "They she said with a slight smile. Brandt blushed with embarrassment and spluttered incoherently for a moment. The pilot might have spluttered for some time had not the foremost alien stirred, causing a diversion.

They crowded him as he awoke and looked about him. His expression was undecipherable, though there was quite a change in facial composure as he saw the kind of white-faced animals that surrounded him. He looked, and then he clutched rapidly at a device on his belt. Barden swung a fist and caught the creature on the forearm, causing him to drop the halfdrawn weapon. Brandt stooped over and picked it up, and the rest of the crew proceeded to disarm the other three.

Edith found a length of wire and made a loop of it. She held it in front of the alien.

He relaxed, splaying his hands and holding them wide from his body. Her action had been understood and the creature did not want his hands tied.

"Jerry," said Barden. "Set the controls for superspeed towards anywhere in the uni-

verse, and get us away from here.'

"Solward?"

"No. He should get as little information

as possible.

Jerry left, and the ship soon turned slightly and started off. Barden waved the creature to the port and pointed out Procyon, which was diminishing swiftly. The alien grew excited, and made wondering motions.

That . . . thing . . . knows what the

score is, partly," observed Edith.

"That . . . thing . . . had better behave," said Barden flatly. "And while we're wondering about him, I hate to think of him being called a Procyonian.

"Call 'em Pokeys," said Tim Evans. "O.K. Now let's show him his ship."

The alien's excitement changed to dismay as he viewed the wreckage. He looked at it, and then as if wiping it off as finished, he

turned away.

There was but one cargo lock in Barden's ship. And though the alien craft had been trimmed, and considerable of it trimmed away and left, it was still packed in with most of the remaining spares. These included the four superdrive motors, mounted on

their girders with the atomic units. The alien saw these and went over to inspect

them, and Barden let him go.

What possibly could have been familiar they did not know. The chances of an alien gasoline engine being instantly recognizable as such by a Terran is problematical. A simple electric motor might be especially if connected to a storage battery, or even by a wire cable to a wall outlet. Doubtless, the electron tube would be recognized by a spider-man from the other end of the galaxy, for the handling of electrons must be similar no matter where they are used. There will be cathodes and grids and anodes and connecting prongs, wires, or terminals.

The unprotected superdrive motor was not incased. It had been a job intended for test-stand operation and, therefore, it could be inspected fairly well. Something about it was familiar, and one spot of familiarity was sufficient for the alien to reconstruct the

He nearly exploded with frantic gestures. He ran to Barden—his run was a swift waddle due to the wide leg-base—and clutched Tom's arm. He pointed to the cutapart spaceship and indicated that he wanted to go up into that pile to find something. Barden shrugged and nodded, and then fol-

lowed the alien.

It was difficult for Barden, for the alien was sure-footed in his climb up the jagged edges to one section near the middle of the pile. He disappeared inside and found a piece of equipment, which he brought out. He set this upon the floor and returned with other equipment which he added to the original piece. Then taking the whole bunch in his arms, he led them up to the operations

Here he put it on a table. Then he opened the main piece and drew out a two-pronged plug which he waved in Barden's face, made plugging gestures into the blank wall, and

then made searching motions.

Barden pointed to the nearest convenience outlet, and the creature waddled to it with

the rest of his equipment.

He probed into the openings with testleads and read the results on meters of his own. He showed Barden exactly what the

meters should read.

Barden nodded and they set to work matching their line-current to the alien's specifications. It turned out to be one hundred ninety-three volts at seventy cycles. Meanwhile, one of Barden's men replaced the alien's plug with a Terran-type and they inserted it gingerly. The alien put a templeset over his head and handed one to Barden.

"This," came the thought, "is an instrument used to extract information from enemies. It will serve as a means of communication."

"Why did you fire on us?" thought Barden.

"You are alien. We are at war: in fact have been at war with the devils from that star-" and here came a mixed-impression of a distorted constellation that was not familiar to Barden, who was not too familiar with astronomy anyway, and so he passed it over. He stopped the alien momentarily, to send one of the men to tell Jerry Brandt to return to within a light-year or so of

Procyon.
"But," continued the alien, "you are not using—that?"

"Not exactly," said Barden. "No, for that means death."

"We were going to try it out," was

Barden's calm thought.
"On— NO!" came the terrified reply.
"Well," returned Barden, "we're never pleased with red-hots who shoot at us!'

'But an entire system?" came the pleading exclamation.

Filled with people of the same ilk,"

returned Barden, unimpressed.

"But even warfare must not be annihila-tion," objected the alien. "For of what value is a dead enemy?"

"They are no longer any bother," Barden grunted. "We dislike being bothered, and our will happens to be that we want to go wherever we choose at any time we please. A favorable attitude upon the part of any other culture is one that permits us our will. A dead culture will never obstruct us, for one thing. It will never revert to its original attitude of belligerency, for the second thing. And for the third thing, alien, with the interstellar drive we have, we can find those cultures in the galaxy which see exactly as we do, therefore it is to our advantage to eliminate any malcontents right now.

to do?" "But what do you intend

demanded the creature.

"My system has been the tool of some other culture. The purpose is not clear, though the outcome might have been quite disastrous. I intend to find both that culture and their reasons and extract full payment!"

"But how--?"

Barden smiled in a hard manner. "I intend to plant one of these unprotected space motors on one of your planets," he said. "That is for my own protection. Then we'll collect one of the enemy, and do likewise with his system. Then you and he will have your little talk-and you'll first call off this war or you'll both be enjoying novas in your own backyards. It's about time that people learned how to get along with one another!

"But I have little authority."

"I have," smiled Barden in a completely self-satisfied manner. "I have all the authority necessary to demand that your superiors and your scientists meet their contemporaries of your enemy-and peacefully."

"What are you going to do with me?"

"Do you know both languages?"
"No," answered the alien. "That's why we

use the mentaphone."
"What do you know of the space motor?" "Very little. It is, as you know, dangerous. We are forbidden to experiment on it. "You know it is dangerous?" asked

Barden.

"We have excellent reason to believe so. Our studies have been purely theoretical. But tell me, how do you hope to accomplish this mission of yours?"

"One of you four will be permitted to land and carry our message. One of the enemy race will do likewise."

"You can never The alien disagreed. land," "You can said. not

approach.

No?" said Barden harshly. "Well, we'll plant our motors first. And you'll use whatever you have to communicate with them and you'll tell 'em all. Then, my squat friend, there had better be a ten-thousand piece brass band playing the Solar Anthem as we land! Or else!'

Tom Barden sat in an easy-chair, relaxing. He was watching the others, who were glaring at one another and trying to conceal their thoughts. Lanthar—he of Procyon—and Grenis of Sirius both knew that the Terran who sat there so easily was not

fooling.

"Now," said Barden, "what's the story? I've told you what happened and why I'm angry. This warfare must stop, and Sol, too, must be protected. Only by complete agreement can all three of us occupy the sky in safety. Otherwise, there may be but two of us-and perhaps only one. You-Lantharwhat do you know of the space motor?"

"I'll tell." said the one from Procyon. "I've been in disagreement with the plan but outvoted. We discovered it and its danger. We'd have worked upon it, but we could not permit it to be used in space because of attack. We could not try it on a planet because of the danger. Remember, we were at war and could afford to take no chances. There was a large faction who outvoted me —and then they permitted its theft from a false laboratory. It is amusing, Terran, to go into the full details of how this laboratory was set up, run, and finally thefted. We actually treated it as though it held one of our high secrets, but we were lax only in the total number of guards we used. Theysucceeded.

"The purpose of this was to permit them to try it out. That would mean their destruction. I've insisted that a dead enemy is of no

"We follow your reasoning, all of us," said Barden. "And go further. We state that an enemy is a total loss per se and we avoid the expense. Now, Grenis, you stole the plans?

"We did." said the Sirian. "But there was

something wrong. Not only did we steal the plans, but we inspected their plant . While they were setting up their laboratory they forgot to include some means of accepting and dissipating enough transmitted power to make the work look real. There was a quite large discrepancy between the power used and the power we calculated would be needed to carry on such a program. So we became suspicious—which started when we were able to penetrate the place in the first

"What we found was interesting," said the Sirian, "But we were suspicious. We studied it carefully, and it seemed perfect. But, Terran, came again the suspicion. For if this were so perfect, why weren't they using it?

"Because it might be a trap," he went on. "And like he and his, we dared not establish a space-laboratory because of the fear of attack. So we were completely stopped."

Lanthar grunted. "So he and his bunch went to work on a method of contacting other people at a great distance," he said. "It took them a long time and they were without success at all until they succeeded in contacting you."

"That is correct," said Grenis, making an apology. "We have detectors capable of working on the gravitic effects. A nova would disrupt both the magnetic and the gravitic levels sufficiently to warn us immediately. And we knew that any race who was not suspicious of an enemy would try it-"

"I see," said Barden angrily. "Then we have you to thank? And you," he said to Lanthar, "knowing that this was done, tried

to protect us?'

'Not basically," apologized the man from Procyon. "You see, we did not know younor even where you were in the galaxy. You meant nothing to us at all then, except as a consulting service for our enemy—completely hidden and quite safe. We did not want you to go into nova because that would have warned them. We knew that after a period of time, with no sign of failure, they'd try

"A fine pair of stinkers," sneered Barden.
"Well," he said with a laugh, "Now you'll
co-operate with us all, or else! But Lanthar, how can you be certain that nova will

Lanthar of Procyon stood up and smiled tolerantly. "Me-?" he said. "I know only what I've been told about it. Strangely enough, it came to me in a dream, too!

Somewhere in the galaxy, two scientists consulted their time-predictions. They agreed silently that sufficient time had been permitted, and that their detectors had shown no warping of the magneto-gravitic continuum. Despite the questionable value of negative evidence, they felt safe.
"I doubt all new arts," said one of them.

thrusting the switch home, "especially when

I know not the source.

DREAMS ARE SACRED

By PETER PHILLIPS

A new English author presents a suggestion for curing the schizo who retires from reality into his own world of dreams. Louse up his dreams!

WHEN I was seven, I read a ghost story and babbled of the consequent nightmare to my father.

"They were coming for me, Pop," I sobbed. "I couldn't run, and I couldn't stop em, great big things with teeth and claws like the pictures in the book, and I couldn't wake myself up, Pop, I couldn't come awake.

Pop had a few quiet cuss words for folks who left such things around for a kid to pick up and read; then he took my hand gently in his own great paw and led me

into the six-acre pasture.

He was wise, with the canny insight into human motives that the soil gives to a man. He was close to nature and the hearts and minds of men, for all men ultimately depend on the good earth for sustenance and life.

He sat down on a stump and showed me a big gun. I know now it was a heavy Service Colt .45. To my child eyes, it was enormous. I had seen shotguns and sporting rifles before, but this was to be held in one hand and fired. Gosh, it was heavy. It dragged my thin arm down with its sheer, grim weight when Pop showed me how to hold it.

Pop said: "It's a killer. Pete. There's nothing in the whole wide world or out of it that a slug from Billy here won't stop. It's killed lions and tigers and men. Why, if you aim right, it'll stop a charging elephant. Believe me, son, there's nothing you can meet in dreams that Billy here won't stop. And he'll come into your dreams with you from now on, so there's no call to be

scared of anything."

He drove that deep into my receptive subconscious. At the end of half an hour, my wrist ached abominably from the kick of that Colt. But I'd seen heavy slugs tear through two-inch teakwood and mild steel plating. I'd looked along that barrel, pulled the trigger, felt the recoil rip up my arm and seen the fist-size hole blasted through a sack of wheat.

And that night, I slept with Billy under my pillow. Before I slipped into dreamland, I'd felt again the cool, reassuring butt.

When the Dark Things came again, I was almost glad. I was ready for them. Billy was there, lighter than in my waking hours or maybe my dream-hand was biggerbut just as powerful. Two of the Dark Things crumpled and fell as Billy roared and kicked, then the others turned and fled.

Then I was chasing them, laughing, and

firing from the hip.

Pop was no psychiatrist, but he'd found the perfect antidote to fear—the projection into the subconscious mind of a commonsense concept based on experience.

Twenty years later, the same principle was put into operation scientifically to save the sanity-and perhaps the life-of Marsham Craswell

"Surely you've heard of him?" said Stephen Blakiston, a college friend of mine

who'd majored in psychiatry.
"Vaguely," I said. "Science-fiction, fan-

tasy . . . I've read a little. Screwy."
"Not so. Some good stuff." Steve waved a hand round the bookshelves of his private office in the new Pentagon Mental Therapy Hospital, New York State. I saw multicolored magazine backs, row on row of them. "I'm a fan," he said simply. "Would you call me screwy?'

I backed out of that one. I'm just a sports columnist, but I knew Blakiston was tops in two fields-the psycho stuff and

electronic therapy.

Steve said: "Some of it's the old 'peroo, of course, but the level of writing is generally high and the ideas thought-provoking. For ten years, Marsham has been one of the most prolific and best-loved writers in

the game.
"Two years ago, he had a serious illness, didn't give himself time to convalesce properly before he waded into writing again. He tried to reach his previous output, tending more and more towards pure fantasy. Beautiful in parts, sheer rubbish sometimes.

"He forced his imagination to work, set himself a wordage routine. The tension became too great. Something snapped. Now he's here."

Steve got up, ushered me out of his office.

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"I'll take you to see him. He won't see you. Because the thing that snapped was his conscious control over his imagination. It went into high gear, and now instead of writing his stories, he's living them—quite literally, for him.

"Far-off worlds, strange creatures, weird adventures—the detailed phantasmagoria of a brilliant mind driving itself into insanity through the sheer complexity of its own invention. He's escaped from the harsh reality of his strained existence into a dream world. But he may make it real enough to kill himself.

"He's the hero of course," Steve continued, opening the door into a private ward. "But even heroes sometimes die. My fear is that his morbidly overactive imagination working through his subconscious mind will evoke in this dream world in which he is living a situation wherein the hero must die.

"You probably know that the sympathetic magic of witchcraft acts largely through the imagination. A person imagines he is being hexed to death—and dies. If Marsham Cras-well imagines that one of his fantastic creations kills the hero—himself—then he just won't wake up again.

Drugs won't touch him. Listen."

Steve looked at me across Marsham's bed. I leaned down to hear the mutterings from

the writer's bloodless lips.

. We must search the Plains of Istak for the Diamond. I, Multan, who now have the Sword, will lead thee; for the Snake must die and only in virtue of the Diamond can his death be encompassed. Come."

Craswell's right hand, lying limp on the coverlet, twitched. He was beckoning his

followers.

'Still the Snake and the Diamond?" asked "He's been living that dream for two days. We only know what's happening when he speaks in his role of hero. Often it's quite unintelligible. Sometimes a spark of consciousness filters through, and he fights to wake up. It's pretty horrible to watch him squirming and trying to pull himself back into reality. Have you ever tried to pull yourself out of a nightmare and failed?

It was then that I remembered Billy, the Colt .45. I told Steve about it, back in his

office.

He said: "Sure. Your Pop had the right idea. In fact, I'm hoping to save Marsham by an application of the same principle. To do it, I need the co-operation of someone who combines a lively imagination with a severely practical streak, hoss-sense—and a sense of humor. Yes—you."

"Uh? How can I help? I don't even know the guy."
"You will," said Steve, and the significant way he said it sent a trickle of ice water down my back. "You're going to get closer

to Marsham Craswell than one man has ever been to another.

"I'm going to project you—the essential you, that is, your mind and personality—into Craswell's tortured brain."

I made pop-eyes, then thumbed at the magazine-lined wall. "Too much of yonder, brother Steve," I said. "What you need is a drink.

Steve lit his pipe, draped his long legs over the arm of his chair. "Miracles and witchcraft are out. What I propose to do is basically no more miraculous than the way your Pop put that gun into your dreams so you weren't afraid any more. It's merely

more complex scientifically.

"You've heard of the encephalograph? You know it picks up the surface neural currents of the brain, amplifies and records them, showing the degree—or absence—of mental activity. It can't indicate the kind or quality of such activity save in very general terms. By using comparison-graphs and other statistical methods to analyze its data, we can sometimes diagnose incipient insanity, for instance. But that's all until we started work on it, here at Pentagon.

"We improved the penetration and induction pickup and needled the selectivity until we could probe any known portion of the brain. What we were looking for was a recognizable pattern among the millions of tiny electric currents that go to make up the imagery of thought, so that if the subject thought of something-a number, maybethe instruments would react accordingly, give a pattern for it that would be repeated every time he thought of that number.

"We failed, of course. The major part of the brain acts as a unity, no one part being responsible for either simple or complex imagery, but the activity of one portion inducing activity in other portions—with the exception of those parts dealing with automatic impulses. So if we were to get a pattern we should need thousands of pickups—a practical impossibility. It was as if we were trying to divine the pattern of a colored sweater by putting one tiny stitch of it under a microscope.

'Paradoxically, our machine was too selective. We needed, not a probe, but an all-encompassing field, receptive simultaneously to the multitudinous currents that

make up a thought-pattern.

'We found such a field. But we were no further forward. In a sense, we were back where we started from—because to analyze what the field picked up would have entailed the use of thousands of complex instruments. We had amplified thought, but we could not analyze it.

There was only one single instrument sufficiently sensitive and complex to do that

-another human brain.'

I waved for a pause. "I'm home," I

"You'd got a thought-reading said.

machine.

"Much more than that. When we tested it the other day, one of my assistants stepped up the polarity-reversal of the field that is, the frequency—by accident. I was acting as analyst and the subject was under narcosis.

"Instead of 'hearing' the dull incoherencies of his thoughts, I became part of them. I was inside that man's brain. It was a nightmare world. He wasn't a clear thinker. I was aware of my own individuality. . When he came round, he went for me baldheaded. Said I'd been trespassing inside his

"With Marsham it'll be a different matter. The dream world of his coma is detailed, as real as he used to make dream worlds to his readers.

"Hold it," I said. "Why don't you take

Steve Blakiston smiled and gave me a high-voltage shot from his big gray

"Three good reasons: I've soaked in the sort of stuff he dreams up, and there's a danger that I would become identified too closely with him. What he needs is a salutary dose of common sense. You're the man for that, you cynical old whiskeyhound.

"Secondly, if my mind gave way under the impress of his imagination, I wouldn't be around to treat myself; and thirdly, when—and if—he comes round, he'll want to kill the man who been heterodyning his dreams. You can scram. But I want to stay and see the results.

"Sorting that out, I gather there's a possibility that I shall wake up as a candidate

for a bed in the next ward?"

"Not unless you let your mind go under. And you won't. You've got a cast-iron non-gullibility complex. Just fool around in your usual iconoclastic manner. Your own imagination's pretty good, judging by some of your fight reports lately.

I got up, bowed politely, said: "Thank you, my friend. That reminds me-I'm covering the big fight at the Garden tomorrow night. And I need sleep, It's late.

So long."

Steve unfolded and reached the door

ahead of me.

"Please," he said, and argued. He can argue. And I couldn't duck those big eyes of his. And he is—or was—my pal. He said it wouldn't take long—(just like a dentist) and he smacked down every "if"

I thought up.

Ten minutes later, I was lying on a twin bed next to that occupied by a silent, whitefaced Marsham Craswell. Steve was leaning over the writer adjusting a chrome-steel bowl like a hair-drier over the man's head. An assistant was fixing me up the same wa♥.

Cables ran from the bowls to a movable arm overhead and thence to a wheeled machine that looked like something from the Whacky Science Section of the World's Fair, A.D. 2,000.

I was bursting with questions, but the only ones that would come out seemed

crazily irrelevant.

"What do I say to this guy? 'Good morning, and how are all your little complexes today?' Do I introduce myself?'

"Just say you're Pete Parnell, and play it off the cuff," said Steve. "You'll see what

I mean when you get there."

Get there. That hit me—the idea of making a journey into some nut's nut. My stomach drew itself up to softball size.

"What's the proper dress for a visit like this? Formal?" I asked. At least, I think I said that. It didn't sound like my voice.

"Wear what you like."

"Uh-huh. And how do I know when to

draw my visit to a close?"

Steve came round my side. "If you haven't snapped Craswell out of it within an hour, I'll turn off the current."

He stepped back to the machine. "Happy

dreams.'

I groaned.

It was hot. Two high summers rolled into one. No, two suns, blood-red, stark in a brazen sky. Should be cool underfoot -soft green turf, pool table smooth to the far horizon. But it wasn't grass. Dust. Burning green dust-

The gladiator stood ten feet away, eyes glaring in disbelief. All of six-four high, great bronzed arms and legs, knotted muscles, a long shining sword in his right

hand.

But his face was unmistakable.

This was where I took a good hold of

myself. I wanted to giggle.
"Boy!" I said. "Do you tan quickly! Couple of minutes ago, you were as white as the bed sheet."

The gladiator shaded his eyes from the twin suns. "Is this yet another guise of the magician Garor to drive me insanean Earthman here, on the Plains of Istak? Or am I already—mad?" His voice was deep, smoothly-modulated.

My own was perfectly normal. Indeed, after the initial effort, I felt perfectly

normal, except for the heat.

I said: "That's the growing idea where I've just come from—that you're going nuts."

You know those half-dreams, just on the verge of sleep, in which you can control your own imagery to some extent? That's how I felt. I knew intuitively what Steve was getting at when he said I could play it off the cuff. I looked down. Tweed suit, brogues-Naturally. That's what I was wearing when I last looked at myself. I had no reason to think I was wearingand therefore to be wearing anything else. But something cooler was indicated in this heat, generated by Marsham Craswell's imagination.

Something like his own gladuator cos-

tume, perhaps.

Sandals-Fine. There were my feet-in

Then I laughed. I had nearly fallen into the error of accepting his imagination.

'Do you mind if I switch off one of those suns?" I asked politely. "It's a little

I gave one of the suns a very dirty look.

It disappeared.

The gladiator raised his sword. You are Garor!" he cried, "But your witchery shall not avail you against the Sword!"

He rushed forward. The shining blade

cleaved the air towards my skull.

I thought very, very fast.

The sword clanged, and streaked off at a sharp tangent from my G.I. brain-pan protector. I'd last worn that homely piece of hardware in the Argonne, and I knew it would stop a mere sword. I took it off.

"Now listen to me, Marsham Craswell," I said. "My name's Pete Parnell, of the Sunday Star, and—"

Craswell looked up from his sword, chest heaving, startled eyes bright as if with recognition. "Wait! I know now who you are-Nelpar Retrep, Man of the Seven Moons, come to fight with me against the Snake and his ungodly disciple, magician sorceress, Garor. Welcome, friend!

He held out a huge bronzed hand. I

shook it.

It was obvious that, unable to rationalize—or irrationalize—me, he was writing me into the plot of his dream! Right. It had been amusing so far. I'd string along for a while. My imagination hadn't taken a licking-yet.

Craswell said: "My followers, the great-hearted Dok-men of the Blue Hills have just been slain in a gory battle. We were about to brave the many perils of the Plains of Istak in our quest for the Diamond—but all this, of course, you know."
"Sure," I said. "What now?"

Craswell turned suddenly, pointed. "There," he muttered. "A sight that strikes terror even into my heart-Garor returns to the battle, at the head of her dread Legion of Lakros, beasts of the Overworld, drawn into evil symbiosis with alien intelligences-invulnerable to men, but not to the Sword, or to the mighty weapons of Nelpar of the Seven Moons. We shall fight them alone!"

Racing across the vast plain of green dust towards us was a horde of . . . er . creatures. My vocabulary can't cope fully with Craswell's imagination. Gigantic, shimmering things, drooling thick ichor. half-flying, half-lolloping. Enough to say I looked around for a washbasin to spit in. I found one, with soap and towels complete, but I pushed it over, looked at a patch of green dust and thought hard.

The outline of the phone booth wavered a little before I could fix it. I dashed inside, dialed, "Police H.Q.? Riot squad

here-and quick!"

I stepped outside the booth. Craswell was whirling the Sword round his head. velling war cries as he faced the onrushing

monsters.

From the other direction came the swelling scream of a police siren. Half a dozen good, solid patrol cars screeched to dust-spurting stop outside the phone booth. I don't have to think hard to get a New York cop car fixed in my mind. These were just right. And the first man out, running to my side and patting his cap on firmly, was just right, too.

Michael O'Faolin, the biggest, toughest,

nicest cop I know.

"Mike," I said, pointing. "Fix 'em." "Shure, an' it's an aisy job f'the bhoys I've brought along," said Mike, hitching his belt.

He deployed his men.

Craswell looked at them fanning out to take the charge, then staggered back towards me, hand over his eyes. "Madness!" he shouted. "What madness is this? What are you doing?'

For a moment, the whole scene wavered. The lone red sun blinked out, the green desert became a murky transparency through which I caught a split-second glimpse of white beds with two figures lying on them. Then Craswell uncovered

his eyes.

The monsters began to diminish some twenty yards from the riot squad. By the time they got to the cops, they were man-size, and very amenable to discipline enforced by raps over their horny noggins with nightsticks. They were bundled into the squad cars, which set off again over the plains.

Michael O'Faolin remained. I said: "Thanks, Mike. I may have a couple of spare tickets for the big fight tomorrow night. See you later." Pete Tis me

"Just what I was wantin' Pete. Tis me day off. Now, how do I get home?"

I opened the door of the phone booth.

"Right inside." He stepped in. I turned to Craswell.

"Mighty magic, O Nelpar!" he ex-claimed. "To creatures of Garor's mind you opposed creatures of your own!"

He'd weaved the whole incident into his

plot already. "We must go forward now, Nelpar of the Seven Moons-forward to the Citadel of the Snake, a thousand lokspans over the burning Plains of Istak."

'How about the Diamond?"

"The Diamond-?"

Evidently, he'd run so far ahead of himself getting me fixed into the landscape that he'd forgotten all about the Diamond that could kill the Snake. I didn't remind him.

However, a thousand lokspans over the burning plains sounded a little too far for walking, whatever a a lokspan might be.
I said: "Why do you make things tough for yourself, Craswell?"

"The name," he said with tremendous dignity, "is Multan."

"Multan, Sultan, Shashlik, Dikkidam, Hammaneggs or whatever polysyllabic poohbah you wish to call yourself-I still ask, why make things tough for yourself when there's plenty of cabs around? Just whistle." I whistled. The Purple Cab swung in,

perfect to the last detail, including a hulking-backed, unshaven driver, gorilla ringer for the impolite who'd brought me out to Pentagon that evening.

There is nothing on earth quite so unutterably prosaic as a New York Purple Cab with that sort of driver. The sight upset Craswell, and the green plains wavered again while he struggled to fit the cab into his dream.

"What new magic is this! You are in-

deed mighty, Nelpar!"

He got in. But he was trembling with the effort to maintain the structure of this world into which he had escaped, against my deliberate attempts to bring it crashing round his ears and restore him to colorless but sane—normality.

At this stage, I felt curiously sorry for him; but I realized that it might only be by permitting him to reach the heights of creative imagery before dousing him with the sponge from the cold bucket that I could jerk his drifting ego back out of dreamland.

It was dangerous thinking. Dangerous—

Craswell's thousand lokspans appeared to be the equivalent of ten blocks. Or perhaps he wanted to gloss over the mundane nearreality of a cab ride. He pointed forward, past the driver's shoulder: "The Citadel of the Snake!'

To me, it looked remarkably like a wedding cake designed by Dali in red plastic:—ten stories high, each story a platter half a mile thick, each platter diminishing in size and offset on the one beneath so that the edifice spiraled towards the brassy sky.

The cab rolled into its vast shadow, stopped beneath the sheer, blank precipice of the base platter, which might have been two miles in diameter. Or three. Or four. What's a mile or two among dreamers?

Craswell hopped out quickly. I got out

on the driver's side.
The driver said: "Dollar-fifty."

Square, unshaven jaw, low forehead, dirty-red hair straggling under his cap. I said: "Comes high, for a short trip."
"Lookit the clock," he growled, squirming

his shoulders. "Do I come out and get it?"

I said sweetly: "Go to hell."

Cab and driver shot downwards through the green sand with the speed of an express elevator. The hole closed up. The times I've wanted to do just that-

Craswell was regarding me open-mouthed. I said: "Sorry. Now I'm being escapist, too. Get on with the plot."

He muttered something I didn't catch, strode across to the red wall in which a crack, meeting place of mighty gates, had

appeared, and raised his sword.
"Open, Garor! Your doom is nigh.
Multan and Nelpar are here to brave the terrors of this Citadel and free the world from the tyranny of the Snake!" He hammered at the crack with the sword-hilt.

"Not so loud." I murmured. "You'll wake the neighbors. Why not use the bell-push?" I put my thumb on the button and pressed. The towering gates swung slowly open.

"You . . . you have been here before-"Yes—after my last lobster supper." I bowed. "After you."

I followed him into a great, echoing tunnel with fluorescent walls. The gates closed behind us. He paused and looked at me with an odd gleam in his eyes. A gleam of—sanity. And there was anger in the set of his lips. Anger for me, not Garor or the Snake.

It's not nice to have someone trampling all over your ego. Pride is a tiger—even in dreams. The subconscious, as Steve had explained to me, is a function or state of the brain, not a small part of it. In thwarting Craswell, I was disparaging not merely his dream, but his very brain, sneering at his intellectual integrity, at his abilities as an imaginative writer.

In a brief moment of rationality, I believe he was strangely aware of this.

He said quietly: "You have limitations, Nelpar. Your outward-turning eyes are blind to the pain of creation; to you the crystal stars are spangles on the dress of a scarlet woman, and you mock the Godblessed unreason that would make life more than the crawling of an animal from womb to grave. In tearing the veil from mystery, you destroy not mystery-for there are many mysteries, a million veils, world within and beyond worlds-but beauty. And in destroying beauty, you destroy your soul."

These last words, quiet as they sounded, were caught up by the curving walls of the huge tunnel, amplified then diminished in pulsing repetition, loud then soft, a surging hypnotic echo: "Destroy your SOUL,

DESTROY your soul SOUL-

Craswell pointed with his sword. His voice was exultant. "There is a Veil, Nelpar-and you must tear it lest it become your shroud! The Mist—the Sentient Mist of Citadel!

I'll admit that, for a few seconds, he'd had me a little groggy. I felt-subdued. And I understood for the first time his power as

a word-spinner.

I knew that it was vital for me to reassert

myself.

A thick, gray mist was rolling, wreathing slowly towards us, filling the tunnel to roof-

height, puffing out thick, groping tentacles.
"It lives on Life itself," Craswell shouted.
"It feeds, not on flesh, but on the vital principle that animates all flesh. I am safe, Nelpar, for I have the Sword. Can your magic save you?"
"Magic!" I said. "There's no gas in-

vented yet that'll get through a Mark 8.

Gas-drill—face-piece first, straps behind the ears. No, I hadn't forgotten the old routine.

I adjusted the mask comfortably. "And if it's not gas," I added, "this will fix it." I felt over my shoulder, unclipped a nozzle, brought it round into the "ready" position.

I had only used a one-man flame-thrower once-in training-but the experience was

etched on my memory.

This was a de luxe model. At the first thirty-foot oily, searing blast, the Mist curled in on itself and rolled back the way it had come. Only quicker.

I shucked off the trappings. "You were in the Army for a while, Craswell. Re-

member?"

The shining translucency of the walls dimmed suddenly, and beyond them I glimpsed, as in a movie close-up through an unfocused projector, the square, intense face of Steve Blakiston.

Then the walls re-formed, and Craswell, still the bronzed, naked-limbed giant of his imagination, was looking at me again, frowning, worried. "Your words are strange, O Nelpar. It seems you are master of mysteries beyond even my knowing." I put on the sort of face I use when the

sports editor queries my expenses, aggrieved, pleading. "Your trouble, Craswell, is that you don't want to know. You just won't remember. That's why you're here. But life isn't bad if you oil it a little. Why not snap out of this and come with me for a drink?"

"I do not understand," he muttered.
"Put we have a mission to perform Follow"

"But we have a mission to perform. Follow."

And he strode off.

. Mention of drink reminded me. There was nothing wrong with my memory. And that tunnel was as hot as the green desert. I remembered a very small pub just off the

street-car depot end of Sauchiehall Street, Glasgow, Scotland. A ginger-whiskered ancient, an exile from the Highlands, who'd listened to me enthusing over a certain brand of Scotch. "If ye think that's guid, mon, ye'll no hae tasted the brew frae ma ain private deestillery. Smack ye're lips ower this, laddie-" And he'd produced an antique silver flask and poured a generous measure of golden whisky into my glass. I had never tasted such mellow nectar before or since. Until I was walking down the tunnel behind Crasswell.

I nearly envisaged the glass, but changed my mind in time to make it the antique flask. I raised it to my lips. Imagination's a wonderful thing.

Craswell was talking. I'd nearly forgotten

". . . near the Hall of Madness, where strange music assaults the brain, weird harmonies that enchant, then kill, rupturing the very cells by a mixture of subsonic and supersonic frequencies. Listen!"

We had reached the end of the tunnel and stood at the top of a slope which, broadening, ran gently downwards, veiled by a blue haze, like the smoke from fifty million cigarettes, filling a vast circular hall. The haze eddied, moved by vagrant, sluggish currents of air, and revealed on the farther side, dwarfed by distance but obviously enormous, a complex structure of pipes and consoles.

A dozen Mighty Wurtlitzers rolled into one would have appeared as a miniature piano at the foot of this towering musicmachine.

At its many consoles which, even at that distance, I could see consisted of at least half-a-dozen manuals each, were multilimbed creatures—spiders or octopuses or Poliloflipops-I didn't ask what Craswell

called them-I was listening.

The opening bars were strange enough, but innocuous. Then the multiple tones and harmonies began to swell in volume. I picked out the curious, sweet harshness of oboes and bassoons, the eldritch, rising ululation of a thousand violins, the keen shrilling of a hundred demonic flutes, the sobbing of many 'cellos. That's enough. Music's my hobby, and I don't want to get carried away in describing how that crazy symphony nearly carried me away.

But if Craswell ever reads this, I'd like him to know that he missed his vocation. He should have been a musician. His dreammusic showed an amazing intuitive grasp of orchestration and harmonic theory. If he could do anything like it consciously, he would be a great modern composer.

Yet not too much like it. Because it began to have the effects he had warned about. The insidious rhythm and wild melodies

seemed to throb inside my head, setting up a vibration, a burning, in the brain tissue. Imagine Puccini's "Recondita Armonia"

re-orchestrated by Stravinsky then arranged by Honneger, played by fifty symphony orchestras in the Hollywood Bowl, and you might begin to get the idea.

I was getting too much of it. Did I say

music was my hobby? Certainly-but the only instrument I play is the harmonica. Quite well, too. And with a microphone, I

can make lots of nice noise. A microphone—and plenty of amplifiers.

I pulled the harmonica from my pocket, took a deep breath, and whooped into "Tiger Rag," my favorite party-piece.

A stunning blast-wave of jubilant jazz, riffs, tiger-growls and tremolo discords from the tiny mouth organ, crashed into the vast hall from the amplifiers, completely swamping Craswell's mad music.

I heard his agonized shout even above the din. His tastes in music were evidently not as catholic as mine. He didn't like jazz.

The music-machine quavered, the multilimbed organists, ludicrous in their haste to escape from an unreal doom, shrank, withered to scuttling black beetles; the lighting effects that had sprayed a rich, unearthly effulgence over the consoles died away into pastel, blue gloom; then the great machine itself, caught in swirl upon wave of augmented chords complemented and reinforced by its own outpourings, shivered into fragments, poured in a chaotic stream over the floor of the hall.

I heard Craswell shout again, then the scene changed abruptly. I assumed that, in his desire to blot out the triumphant paean of jazz from his mind, and perhaps in an unconscious attempt to confuse me, he had skipped a part of his plot and, in the opposite of the flash-back beloved of screen writers, shot himself forward. We were-

somewhere else.

Perhaps it was the inferiority complex I was inducing, or in the transition he had forgotten how tall he was supposed to be, but he was now a mere six feet, nearer my own height.

He was so hoarse, I nearly suggested a gargle. "I . . . I left you in the Hall of Madness. Your magic caused the roof to collapse. I thought you were—killed."

So the flash-forward wasn't just an attempt to confuse me. He'd tried to lose me, write

me out of the script altogether.

I shook my head. "Wishful thinking, Craswell old man," I said reproachfully. "You can't kill me off between chapters. You see, I'm not one of your characters at all. Haven't you grasped that yet? The only way you can get rid of me is by waking up.

'Again you speak in riddles," he said, but there was little confidence in his voice.

The place in which we stood was a great, high-vaulted chamber. The lighting effects-

as I was coming to expect—were unusual and admirable-many colored shafts or from unseen sources. moving, meeting and merging at the farther end of the chamber in a white, circular blaze which seemed to be suspended over a throne-

Craswell's size-concepts were stupendous. He'd either studied the biggest cathedrals in Europe, or he was reared inside Grand Central Station. The throne was apparently a good half-mile away, over a completely bare but softly-resilient floor. Yet it was coming nearer. We were not walking. I looked at the walls, realized that the floor itself, a gigantic endless belt, was carrying us along.

The slow, inexorable movement was impressive. I was aware that Craswell was covertly glancing at me. He was anxious that I should be impressed. I replied by speeding up the belt a trifle. He didn't appear to

notice.

He said: "We approach the Throne of the Snake, before which, his protector and disciple, stands the female magician and sorceress, Garor. Against her, we shall need all your strange skills, Nelpar, for she stands invulnerable within an invisible shield of pure force.

"You must destroy that barrier, that I may slay her with the Sword. Without her, the Snake, though her master and selfproclaimed master of this world, is power-

less, and he will be at our mercy.

The belt came to a halt. We were at the foot of a broad stairway leading to the throne itself, a massive metal platform on which the Snake reposed beneath a brilliant ball of light.

The Snake was—a snake. Coil on coil of overgrown python, with an evil head the size of a football swaying slowly from side

to side.

I spent little time looking at it. I've seen snakes before. And there was something worth much more prolonged study standing just below and slightly to one side of the throne.

Craswell's taste in feminine pulchritude was unimpeachable. I had half-expected an ancient, withered horor, but if Flo Ziegfield had seen this baby, he'd have been scrambling up those steps waving a contract, forceshield or no force-shield, before you could get out the first glissando of a wolf-whistle.

She was a tall, oval-faced, green-eyed brunette, with everything just so, and nothing much in the way of covering-a scanty metal chest-protector and a knee-length, filmy green skirt. She had a tiny, delightful mole on her left cheek.

There was a curious touch of pride in Craswell's voice as he said, rather unnecessarily: "We are here, Garor," and looked

at me expectantly.

The girl said: "Insolent fools—you are here to die."

Mm-m-m—that voice, as smooth and rich as a Piatigorski cello-note. I was ready to give quite a lot of credit to Craswell's imagination, but I couldn't believe that he'd dreamed up this baby just like that. I guessed that she was modeled on life; someone he knew; someone I'd like to know—someone pulled out of the grab bag of memory in the same way as I had produced Mike O'Faolin and that grubby-chinned cabdriver.

"A luscious dish," I said. "Remind me to ask you later for the phone number of the

original, Craswell.'

Then I said and did something that I have since regretted. It was not the behavior of a gentleman. I said: "But didn't you know they were wearing skirts longer, this season?"

I looked at the skirt. The hem line shot down to her ankles, evening-gown length.

Outraged, Craswell glared at his girlfriend. The skirt became knee-length. I made it fashionable again.

Then that skirt-hem was bobbing up and down between her ankles and her knees like a crazy window blind. It was a contest of wills and imaginations, with a very pretty pair of well-covered tibiae as battleground. A fascinating sight. Garor's beautiful eyes blazed with fury. She seemed to be strangely aware of the misbecoming nature of the conflict.

Craswell suddenly uttered a ringing, petulant howl of anger and frustration—a score of lusty-lunged infants whose rattles had been simultaneously snatched from them couldn't have made more noise—and the intriguing scene was erased from view in an eruption of jet-black smoke.

When it cleared, Craswell was still in the same relative position but his sword was gone, his gladiator rig was torn and scorched, and thin trickles of blood streaked his mus-

cular arms.

I didn't like the way he was looking at me. I'd booted his super-ego pretty hard that

time.

I said: "So you couldn't take it. You've skipped a chapter again. Wise me up on what I've missed, will you?" Somehow it didn't sound as flippant as I intended.

He spoke incisively. "We have been captured and condemned to die, Nelpar. We are in the Pit of the Beast, and nothing can save us, for I have been deprived of the Sword, and you of your magic.

"The ravening jaws of the Beast cannot be stayed. It is the end, Nelpar. The End—"

His eyes, large, faintly luminous, looked into mine. I tried to glance away, failed.

Irritated beyond bearing by my importunate clowning, his affronted ego had assumed the whole power of his brain, to assert itself through his will-to dominate

The volition may have been unconscious he could not know why he hated me—but the effect was damnable.

And for the first time since my brash intrusion into the most private recesses of his mind, I began to doubt whether the whole business was quite—decent.

Sure, I was trying to help the guy, but ...

but dreams are sacred.

Doubt negates confidence. With confidence

gone, the gateway is open to fear.

Another voice, sibilant. Steve Blakiston saying "... unless you let your mind go under." My own voice "... wake up as a candidate for a bed in the next ward—" No, not—"... not unless you let your mind go under—" And Steve had been scared to do it himself, hadn't he? I'd have something to say to that guy when I got out. If I got out... if—

The whole thing just wasn't amusing any

more.

"Quit it, Craswell," I said harshly. "Quit making goo-goo eyes, or I'll bat you one—and you'll feel it, coma or no coma."

He said: "What foolish words are these,

when we are both so near to death?'

Steve's voice: "..., sympathetic magic ..., imagination. If he imagines that one of his fantastic creations kills the hero—himself —he just won't wake up again."

That was it. A situation in which the hero must die. And he wanted to envisage my death, too. But he couldn't kill me. Or could he? How could Blakiston know what powers might be unleashed by the concept of death during this ultramundane communion of minds?

Didn't psychiatrists say that the deathurge, the will to die, was buried deep, but potent, in the subconscious minds of men? It was not buried deep here. It was glaring, exultant, starkly displayed in the eyes of

Marsham Craswell.

He had escaped from reality into a dream, but it was not far enough. Death was the

only full escape-

Perhaps Craswell sensed the confusion of thought and speculation that laid my mind wide open to the suggestions of his rioting, perfervid, death-intent imagination. He waved an arm with the grandiloquent gesture of a Shakespearean Chorus introducing a last act, and brought on his monster.

In detail and vividness it excelled everything he had dreamed up previously. It was his swan-song as a creator of fantastic forms,

and he had wrought well.

saw, briefly, that we were in the center of an enormous, steep-banked amphitheater. There were no spectators. No crowd scenes for Craswell. He preferred that strange, timeless emptiness which comes from using a minimum number of characters.

Just the two of us, under the blazing rays of great, red suns swinging in a molten sky. I couldn't count them.

I became visually aware only of the

Beast.

An ant in the bottom of a washbowl with a dog snuffling at it might feel the same way. If the Beast had been anything like a dog. If it had been anything like anything.

It was a mass the size of several elephants. An obscene hulking gob of animated, semitransparent purple flesh, with a gaping, circular mouth or vent, ringed inside with pointed beslimed tusks, and outside with-

As a static thing, it would have been a filthy envenomed horror, a thing of surpassing dread in its mere aspect; but the most fearsome thing was its nightmarish mode of progression

Limbless, it jerked its prodigious bulk forward in a series of heaves—and lubricated its path with a glaucous, viscid fluid which slopped from its mouth with every jerk.

It was heading for us at an incredible

pace. Thirty yards— Twenty-

The rigidity of utter fear gripped my limbs. This was true nightmare. I tried desperately to think . . . flame-thrower . . how . . . I couldn't remember . . . my mind was slipping away from me in face of the onward surging of that protoplasmic juggernaut . . . the slime first, then the mouth, closing . . . my thoughts were a screaming turmoil-

Another voice, a deep, drawling, kindly voice, from an unforgettable hour in childhood-"There's nothing in the whole wide world or out of it that a slug from Billy here won't stop. There's nothing you can meet in dreams that Billy here won't stop. He'll come into your dreams with you from now on. There's no call to be scared of anything, Then the cool, hard butt in my hand,-the recoil, the whining irresistible chunk of hot, heavy metal—deep in my subconscious.

"Pop!" I gasped, "Thanks, Pop."

The Beast was looming over me. But Billy was in my hand, pointing into the mouth. I fired.

The Beast jerked back on its slimy trail, began to dwindle, fold in on itself. I fired again and again.

I became aware once more of Craswell beside me. He looked at the dying Beast, still huge, but rapidly diminishing, then at the dull metal of the old Colt in my hand, the wisp of blue smoke from its uptilted

And then he began to laugh.

Great, gusty laughter, but with a touch of hysteria.

And as he laughed, he began to fade from view. The red suns sped away into the sky, became pin points; and the sky was white and clean and blank—like a ceiling.

In fact—what beautiful words are "in

fact"-in fact, in sweet reality, it was a ceiling.

Then Steve Blakiston was peering down, easing the chromium bowl off the rubber

pads round my head.

Thanks, Pete," he said. "Half-an-hour to the minute. You worked on him quicker than an insulin shock."

I sat up, adjusting myself mentally. He pinched my arm. "Sure—you're awake. I'd like you to tell me just what you did—but not now. I'll ring you at your office."

I saw an assistant taking the bowl off

Craswell's head.

Craswell blinked, turned his head, saw me. Half-a-dozen expressions, none of them pleasant, chased over his face.

He heaved upright, pushed aside the

"You lousy bum," he shouted, "I'll murder you!'

I just got clear before Steve and one of the others grabbed his arms.

'Let me get at him-I'll tear him open!" "I warned you," Steve panted. "Get out,

quick.

I was on my way. Marsham Craswell in a nightshirt may not have been quite so impressive physically as the bronzed gladiator of his dreams, but he was still passably muscular.

That was last night. Steve rang this

morning.

"Cured," he said triumphantly, "Sane as you are. Said he realized he'd been overworking, and he's going to take things easier-give himself a rest from fantasy and write something else. He doesn't remember a thing about his dream-coma—but he had a curious feeling that he'd still like to do something unpleasant to a certain guy who was in the next bed to him when he woke up. He doesn't know why, and I haven't told him. But better keep clear.

"The feeling is mutual," I said. "I don't like his line in monsters. What's he going

to write now—love stories?"

Steve laughed, "No. He's got a sudden craze for Westerns. Started talking this morning about the sociological and historical significance of the Colt revolver. He jotted down the title of his first yarn-'Six-Gun Rule, Hev-is that based on something you pulled on him in his dream?"

I told him.

So Marsham Craswell's as sane as me,

huh? I wouldn't take bets.

Three hours ago, I was on my way to the latest heavyweight match at Madison Square when I was buttonholed by an offduty policeman.

Michael O'Faolin, the biggest, toughest, nicest cop I know.
"Pete, m'boy," he said. "I had the strangest dream last night. I was helpin'

yez out of a bit of a hole, and when it was all over, you said, in gratitude it may have been, that yez might have a couple of spare tickets f'the fight this very night, and I was wondering whether it could have been a

sort of tellypathy like, and-

I grabbed the corner of the bar doorway to steady myself. Mike was still jabbering on when I fumbled for my own tickets and said: "I'm not feeling too well, Mike. You go. I'll pick my stuff up from the other sheets. Don't think about it, Mike. Just put it down to the luck of the Irish.

I went back to the bar and thought hard into a large whiskey, which is the next best thing to a crystal ball for providing a focus

of concentration.

"Telly-pathy" huh?

No, said the whiskey. Coincidence. For-

Yet there's something in telepathy. Subconscious telepathy—two dreaming minds in rapport. But I wasn't dreaming. I was just tagging along in someone else's dream, Minds are particularly receptive in sleep. Premonitions and what-have-vou. But wasn't sleeping either. Six and four makes minus ten, strike three-you're out. You're nuts, said the whiskey.

I decided to find myself a better-quality crystal ball. A scotch in a crystal glass at

Cevali's club.

So I hailed a Purple Cab. There was something reminiscent about the back of the driver's head. I refused to think about it. Until the pay-off.

"Dollar-fiffy," he growled, then leaned out. "Say—ain't I seen you some place?"

"I'm around," I said, in a voice that squeezed with reluctance past my larynx. "Didn't you drive me out to Pentagon

yesterday?"

"Yeah, that's it," he said. Square unshaven jaw, low forehead, dirty red hair straggling under his cap. "Yeah—but there's something else about your pan. I took a sleep between cruises last night and had a daffy dream. You seemed to come into it. And I got the screwiest idea you already owe me a dollar-fifty.

For a moment, I toyed with the idea of telling him to go to hell But the roadway wasn't green sand. It looked too solid to open up. So I said "Here's five," and stag-

gered into Cevali's.

I looked into a whiskey glass until my brain began to clear, then I phoned Steve Blakiston and talked. "It's the implications," I said finally. "I'm driving myself bats trying to figure out what would have happened if I'd conjured up a few score of my acquaintances. Would they all have dreamed

the same dream if they'd been asleep?"
"Too diffuse," said Steve, apparently through a mouthful of sandwich. "That would be like trying to broadcast on dozens of wavelengths simultaneously with the

same transmitter. Your brain was an integral part of that machine, occupying the same position in the circuit as a complexus of recording instruments, keyed in phase with Craswell's brain—until the pick-up frequency was raised. What happened then I imagined purely as an induction process. It was—as far as the Craswell hook-up was concerned, but-

I couldn't stand the juicy champing noises any longer, and said: "Swallow it before you choke." The guy lives on sandwiches.
His voice cleared. "Don't you see what

we've got? During the amplification of the cerebral currents, there was a backsurge through the tubes and the machine became a transmitter. These two guys were sleeping, their unconscious minds wide open and acting as receivers; you'd seen them during the day, envisaged them vividly—and got tuned in, disturbing their minds and giving them dreams. Ever heard of sympathetic dreams? Ever dreamed of someone you haven't seen for years, and the next day he looks you up? Now we can do it deliberately - mechanically-assisted dream telepathy, the waves reinforced and transmitted electronically! Come on over. We've got to experiment some more."
"Sometimes," I said, "I sleep. That's what

I intend to do now—without mechanical

assistance. So long."

A nightcap was indicated. I wandered back to the club bar. I should have gone home.

She hipped her way to the microphone in front of the band, five-foot ten of dream wrapped up in a white, glove-tight gown. An oval-faced, green-eyed brunette with a tiny, delightful mole on her left cheek. The gown was a little exiguous about the upper regions, perhaps, but not as whistle-worthy as the outfit Craswell had dreamed on her.

Backstage, I got a double shot of ice from those green eyes. Yes, she knew Mr. Craswell slightly. No, she wasn't asleep around midnight last night. And would I be so good as to inform her what business it was of mine? College type, ultra. How they do drift into the entertainment business. Not that I mind.

When I asked about the refrigeration, she said: "It's merely that I have no particular desire to know you, Mr. Parnell."

"Why?"

"I'm hardly accountable to you for my preferences." She frowned as if trying to recall something, added: "In any case—I don't know. I just don't like you. Now if you'll pardon me, I have another number to sing-"

"But, please . . . let me explain—"
"Explain what?"

She had me there. I stumble-tongued, and got a back view of the gown.

[Continued on page 48

THE GREAT AIR MONOPOLY

By RENÉ LAFAYETTE

A neat racket the boys had—you had to buy the privilege of breathing the air of the planet! And enforcing that tax law was quite a trick. Effective, too-

OLE Doc sat in the cool sunlight of Arphon and pulled at a fragrant pipe. The Morgue, his ship-laboratory, sat in lush grass up to its belly beside the sparkling lake and from its side came out an awning to make a

stately pavilion for the master. Sun¹² was thirty degrees Sun¹² was thirty degrees high and Arphon's autumn sucked hungrily at the warmth, even as Ole Doc sucked at the pipe. He was getting away with something with that pipe. His little super-gravitic slave Hippocrates was bustling around, all four hands busy, now and then coming to a full stop to lower his antennae at Ole Doc in dis-approval. It was not of his master that he

disapproved, it was the pipe.
"What if it is his birthday?" growled
Hippocrates. "He shouldn't. He said he
wouldn't. He promised me. Nicotine, ugh! and three whole days until he takes his treatment. Nicotine on his fingers, poisoning him; nicotine in his lungs. Poison, that's what it is. In the pharmacopoeia ... !!"
And he rattled off a long, gruesome list of poisons for, once going, his phonograph-recordwise mind went on into Nilophine, Novocaine and Nymphodryl. Suddenly he realized where all this was heading and in realized where all this was heading and in anger at himself now as well as Ole Doc, got back to work with his birthday party preparations. They were very intricate preparations. After all, there had to be nine hundred and five candles on that cake.

Ole Doc paid his little slave no heed. He sat in the sunlight and puffed his pipe

* U.M.S.—Universal Medical Society—the *U.M.S.—Universal Medical Society—the supreme council of physicians organized in the late Twenty-third Century after the famous Revolt Caduceus which claimed the lives of two billion humanoids of the Earth-Areton Empire through the villainous use of new medical discoveries to wage war and dominate entire countries. George Moulton, M.D., Dr. Hubert Sands, the physio-chemist, James J. Lufberry, M.D., and Stephen Thomas Metridge, M.D., who was later to become as well known as Ole Doc Methuselah had for nearly known as Ole Doc Methuselah, had for nearly a hundred years kept to a laboratory studying far beyond contemporary skills and incidentally extending their work by extending their own lives, came out of retirement, issued a prolives, came out of retirement, issued and du-ray nunciamento—backed with atomic and du-ray

and occasionally made intricate calculations on his gold cuff—his filing case was full of torn cuffs containing solutions which would have rocked even his brothers of the Universal Medical Society,* much less the thousand and five humanoid systems in this one

galaxy.

He didn't hear the clanking chains or the bark of the guards on the march, even though they came closer with every second though they came closer with every second and would pass hard by the ship. It was nothing to Ole Doc that Arphon was a boiling turmoil of revolt and murder. In the eight hundred and eighty years since he had graduated from Johns-Hopkins Medical school in Baltimore, Maryland, First Continental District, Earth, Orbit Three, Sun¹, Rim Zone, Galaxy¹, Universe—or 1, 316°, 1 m. ly hub¹, 264-89, sub-3²⁸ which will find it for you on the space charts if you are going there—he had seen charts if you are going there-he had seen everything, done everything, felt everything, tasted everything, been everything including a Messiah, a Dictator, a humanoid animal in a glass dome and a god, and there were few things left to amaze or interest him.

He supposed some day he would crack

hand weapons and a thousand counter-toxinswhich denied to the casual practitioner all specialized medical secrets. Thus peace came to the Empire. Other systems anxiously clamored for similar aid and other great names of medicine quietly joined them. For centuries, as the Universal Medical Society, these men, hiding great names under nicknames, who eventually became a fixed seven hundred in number, maintained a Center and by casual patrol of the Systems kept medicine as well as disease within rational bounds. Saluting no government, collecting no fees, permitting no infringement, the U.M.S. became dreaded and revered as The Soldiers of Light and under the symbol of the crossed ray rods impinged their will upon the governments of space under a a code of their own more rigorous than any code of laws. For the detailed records and history of the U.M.S., for conditions governing the hundred-year apprenticeship all future members must serve and for the special codes. members must serve and for the special codes of call and appeal to the U.M.S. in case of plague or disaster, consult L. Ron Hubbard's "Conquest of Space," 29th Volume, Chapter XCLII. René LaFayette.

up or get shot or forget his regular youth treatments for a month and wind up in the quiet crypt where sat the nine hundred coffins of black ebony and gold containing all the mortal remains of Soldiers of Light who had departed the service in the only way possible and whose brothers had carefully brought them home.

He calculated from time to time and filled his pipe. After a while, when dinner was over, he'd go to the lake, make an artificial dusk and try out his battery of flies on the trout. Just now he was calculat-

ing

It had came to him that morning that negative could be weighed and if this were so, then it could be canned and if that were true, he could undoubtedly surprise his colleagues at the Center some two hundred million light-years away by making painless amputations so that new limbs could be grown.

He had just come up to his ninety-sixth variable when Hippocrates heard the chain gang. The little slave was ashamed of himself for being too busy or too provoked to heed sounds audible to him these past

sixteen and two-tenths minutes.

Hippocrates jumped to the panel, making the Morgue rock with his great weight and four-handedly threw on a combination of switches which utterly camouflaged the Morgue, screened Ole Doc without making him invisible, trained outward a brace of 600 mm. blasters rated at a thousand rounds a second and turned down the oven so that his cake wouldn't burn. These four importances attended to, Hippocrates hung invisible in the door and eyed the column with disfavor as it came in sight.

Ole Doc saw it at last. It would have been very difficult to have avoided it, seeing that the vanguard—a huge Persephon renegade—would momentarily stumble against the screen, the limit of which he was

paralleling.

It was a weird sight, that column. The lush grass bent under white human feet and became stained with red. Clothing ripped to nothing, eyes sunken and haunted, bent with iron fetters and despair, the hundred and sixteen people captive there appeared like shades just issued forth from hell for a bout with Judgment Day.

The guards were brutish humanoids, eugenicized for slave tending. And this was odd because Ole Doc himself a hundred or was it fifty years before had thought the practice stopped by his own policing. These ape-armed, jaguar-toothed devils were like humans mad with a poisonous stimulant or like Persephons dragged from their pits and injected with satanic human intelligence. Their pointed heads were as thick as helmets, their necks were collared with an owner's mark, their shoulders and shaggy loins girded about with blasters and brass

cases and their elephant-pad feet were shoed in something resembling spittoons. Whoever owned and controlled that crew who in turn controlled these human slaves must be a very rough lad himself.

Doc raised a microglass to his eye and read the collar brand. It wasn't a man's name, it was a commercial company stamp,

"Air, Limited."

Maybe they would have gone on by and nothing whatever would have been written in the *Morgue's* log. But then Ole Doc saw

her.

She was slight, but strong enough to bear this iron. She was curved just so and thus And here eyes and nose and mouth made a triangle, just . . . well, and her hair flowed

back and down her back.

Ole Doc sat up and the pipe dropped unheeded to the ground. He looked harder. The lines before and behind her vanished. The guards vanished. The grass, the sunlight, all Arphon vanished. And there was this girl. Ole Doc stood up and his knees wobbled a little which was odd because Ole Doc was in a physical recondition far superior to most men of twenty-five.

She saw him and for an instant, as she looked and he looked broke her stride. The slave behind her was old and stumbled. The slave ahead was jerked back by his collar. The Persephon humanoid whirled off the screen he had just bumped and came around to see the tangle. And down came his brass

rod.

It never touched the young lady. Ole Doc had not practised drawing and hip shooting for about four hundred years but his hand had not forgotten. That Persephon humanoid sort of exploded into a mist. His arm flew up sixty yards, turned at the top and came down with a thump on the Morgue's screen where it lay, dripping, suspended in air. The guard's blaster belt went off after an instant like a chain of small cannons and blew tufts of grass in the air. The hole smoked and the other guards came up sharply, gaped and as one faced about with guns drawn looking for their quarry.

It was not quite fair. Ole Doc was out of the screen where he could shoot without deflection and he was shooting. And even if he was a fine target it was still not sporting. He had five Persephons only to shoot at him and then there were four, three, two, none. And patches of grass smoked and there was silence. A final belt cartridge exploded in a hole and there was silence again.

The Persephons never knew that they had had the honor of being shot by a Galactic

Medalist in short arms.

The slaves stood still and shivered. A wild one had pinked an old woman at the end of the column and she was sitting down staring at her own blood. The rest were gazing miserably at this new menace who

had risen up from the tall grass. Ole Doc found he was shaking with the excitement and he disliked finding it so for he had often told himself that one should never get a thrill out of killing, that being a barbarous sort of joy and besides at the end there it had been but five to one. He picked up his fallen pipe, jammed it into his mouth and took a drag. The slaves screamed and fell back from this smoking monster, the tobacco habit having been extinct most everywhere for hundreds of years.

Hippocrates grunted with disgust. He had not been able to more than slew the 600 mm. into position and had not had the satisfaction of shooting even one round.

He came out. Shrilly shrewish he said: "You ought to know better. I have told you and told you and told you and you ought to know better. You'll get hurt. I've said you'll get hurt and you will. You leave that to the bravos and buckos. It says right in your code that 'Whosoever shall kill large numbers of people solely for satisfaction shall be given a hearing and shall be fined a week's pay, it being the mission of this Society to preserve mankind in the galaxy—" He brought up short. His terror for Ole Doc had brought him into an error of quoting the Parody Code. It actually said "... kill large numbers for experimentation shall ..." This fussed him so that he tion shall . . ." This fussed him so that he shut off the force screens and came down and would have carried Ole Doc straight back into the ship for a take-off had not his revered master been staring so hard, pipe again forgotten.

Hippocrates took the pipe. He looked for the objection. He knocked out the bowl. He looked again, more wonder in his antennae waves, and slyly broke the pipe to bits. Still no objection. Hippocrates poured out the contents of the pouch and heaved bits and leather as far as his very powerful arms could throw Still no objection. Hippocrates walked all the way around Ole Doc and stared at him. His master was staring at the line of slaves.

No, at the center of the line. And someone there was staring as though hypnotized. 'Oh," moaned Hippocrates, seeing plenty

of trouble. "A girl!"

Now it was no plan of Ole Doc's to inspect Arphon of Sun¹². He was on his leisurely way to hand a deposition warrant to a System Chief over in Sub-Rim 18, 526°, that worthy having failed to respect Section 8, Paragraph 918 of Code 94 of the Universal Medical Society. And if Arphon has slaves like this, it was theoretically none of his medical business.

But she was staring at him.

He flushed a little and looked down. But he was caped in gold and belted in scarlet with metal wings on his yellow boots and was decent.

Hippocrates sighed with the depth of

resignation. He went over and chopped the girl out of the line with a simple twist of the iron links, bare-handed. Then he set her bodily to one side and to the rest made pushing motions with his hands.
"Shoo! Shoo!" said Hippocrates. "You

are free. Go!

"Nonsense," said the girl in a voice which made tingles go up and down Ole Doc's spine. "How can they go anywhere? They have no money to pay the air tax."
"The air—" Hippocrates gaped at her. She

was just a human being to him. Personally he liked machines. "Nonsense yourself. The air's here and the air's free. Shoo! SHOO! You stay," he added over one of his

shoulders to the girl. "Shoo!"

And the slaves sank down and began to inch forward on their knees to the little slave. "No, no," they cried. "We cannot pay the tax. We have sickened already in our homes when the air was shut off. We cannot pay. We are re-possessed and on our way to remarketing. Don't send us away! Help us! Money, money! You pay our tax and we will work-!'

"Master!" cried Hippocrates, scuttling back. For there were definite limits on his skills and when these were reached he had but one god. "Master!"

But the slaves just came on, inching forward on their knees, hands pitifully upraised, begging and whining and Hippocrates fell hastily back again.

"Air, air. Buy us air! You pay our tax.

Don't send us away!"
"MASTER!"

Ole Doc paid no heed to his slave now behind him, to the pathetic cries, to the creeping throng or to anything else on Arphon for that matter. He was still staring at the girl and now she blushed and pulled the rags of a robe around her.

That did it. "Put her in the ship!" said Ole Doc. "The rest of you get out of here. Go back to your homes! Beat it!" But this relapse into the vernacular of his youth had no effect on the crowd. They had crept forward, leaving flattened grass behind them.

Suddenly an old man with a ragged gray stubble and thin chest caught at his throat, rose up and with a wild scream cried, "Air! Air! Oh-" And down he went, full length into the grass. Two others shortly did the same thing.

Ole Doc sniffed alertly. He looked at his third cloak button but it was still gold and

so the atmosphere was all right. He sniffed again. "Test for air," he said to Hippocrates.

The little fellow leaped gladly into the Morgue and in his testing brought visibility back to the ship. He saw, through the port, that this startled half a dozen of the slaves out there into fits and the fact made him feel very superior. He, master of machinery, tested for air. And it was good.

Ole Doc pulled down his helmet to cover his face and walked forward. He rolled over the senseless antique of sixty-five winters and examined him for anything discoverable.

He examined several more and from the eighth, who just that instant was half blind with airlessness and the flash of Ole Doc's U.M.S. gorget, flicked out a specimen of spittle and passed it to Hippocrates.

"Culture it," said Ole Doc.
"Negative," said Hippocrates six minutes later, still carrying 'scope and speed culture flask. "Bacteriologically negative."

"Air!" screamed the old man, reviving. And an instant later She went down on her

face and didn't move.

Ole Doc had her in the ship in about ten seconds. Hippocrates threw a force cordon around the rest and four-handedly went through them spraying a sterilizer all over them with two hands and breaking their chains apart with the remaining sets of fingers.

Air!" they whined and gasped. "Air, air,

air!"

Ole Doc looked sadly down at the girl on the table. She was fragile and lovely, stretched there on the whiteness of the Morgue's operating room. She was in odd contrast to all these brilliant tubes and trays, these glittering rods and merciless meters. Ole Doc sighed and then shook off the trance and became a professional.

"There's such a thing as malnutrition," he said to Hippocrates, "But I never heard of mal-oxygenation. Her chest- Here, what's

this?"

The tag had been clipped solidly through her ear and it read, "Property of Air, Limited. Repossessed Juduary 43rd, '53. By order of Lem Tolliver, President, Air President, Air Limited."

That offended Ole Doc for some reason. He tore it off and put a heal compress on the small, handsome ear. When he removed it five seconds later there were no scars.

Ole Doc read the tag again and then angrily stamped it under foot. He turned to his job and shortly had a mask on the girl which fed her oxygen in proper pulsations and gave her a little ammonia and psiionized air in the bargain.

He was just beginning to take satisfaction in the way her lovely eyes were flickering as she came around when Hippocrates

leaped in, excited.
"Ship landing!" blurted the little fellow. "Guns ready. Tell me when to shoot."

"Whoa," said Ole Doc. "Force screen them off until you see what they are at least. Now, there you are, my dear."

She struggled up and pulled off the mask. She looked mystified at her surroundings until she heard others calling for air outside. Then she flicked her eyes at Ole Doc and it was his turn to sigh.

Hippocrates. "Nicotine. said

women! You never live to be ten thousand, I bet, Next, rum!"

"Fine idea," said Ole Doc. "My dear, if

you'd like to step this way-

Hippocrates watched him open doors for her. He knew Old Doc would take her to a stateroom where she could shower and shift into Ole Doc's robe. And then in the salon that Michalo had newly designed, they'd sit in soft lights and talk above the whine of violins. Ugh! It had been exactly nineteen years and six days since Ole Doc had shown any interest in a woman- The little slave paused. He grinned. After all, this was Ole Doc's birthday. It was hard enough to live hundreds of years with nothing ever exciting any more. Hippocrates knew for his people, gypsum metabolism though they were, normally went utterly stale at twelve thousand and faded into complete boredom. Humans lived faster in the

He grinned and swung up into a gun turret. Let him have his birthday and three

cheers for it.

But the ship called Hippocrates back sharply. And he was again intensely annoyed with Ole Doc. Women. Now look at the trouble that was coming. The ship was a Scoutcraft Raider for atmosphere travel and it had enough armament to slaughter a city and it was manned with humans who, even at this distance, looked extremely unreliable.
It landed on the edge of the screen and

five guards leaped down, blasters ready to cover the debark of a huge-shouldered, black-garbed man. Hippocrates was reminded of a vulture and almost whiffed the odor that always clings to those birds. He turned on the near screen and disregarded the fact that its force kicked about twenty slaves a dozen feet or more outward from the Morgue.

The five scouted the grass, found the holes where the guards had been and fished up bits of melted brass. They stood and glared at the slaves who, seeing the ship, had begun to howl and plead and creep toward that as they had toward Hippocrates.

The big human stopped and looked at the Morgue. Its stern was toward him and he didn't see the crossed ray rods on the nose or the meaningful letters U.M.S.S. Morgue, Ole Doc Methuselah.

'You better stop," said Hippocrates in the

high turret.

The men stopped.

The big human looked up at the turret. He signaled his men to fan out and for his ship to depress its heaviest cannon. Hippocrates shivered a little for he was not sure his screen would hold against the size of those muzzles.

'I'm Big Lem Tolliver!" shouted the human. "This is Air, Limited, talking and if you got a good reason why my Persephons ain't alive, spill it, for I ain't with-

holding my fire long."

"You better go away!" yelled Hippo-crates in derision. "If my master sees you, he'll cut you open to see the size of your liver or drill holes in your skull to equalize the vacuum. You better go!

"Only a hundred and fifteen in this gang," said a shrunken human being who reached only to Tolliver's elbow but who served him as a lieutenant of sorts. "According to the radio report, that's one miss-

'Search the ship!" said Big Lem Tolliver. Hippocrates swooped down with his 600 mm. "Stop and go away. This is the U.M.S.S. Morgue and we specialize in dead men named Lem Tolliver.

He thought this was pretty apt. After all, he'd never imagined being able to convert lines from "Tales of the Early Space Pioneers." He was a success. It stopped them.

"Spacecrap!" said Lem Tolliver in a moment. "That's no U.M.S. ship! You'd

never steal a slave if you were."

"Slaves are U.M.S. business, pardner," said Hippocrates. "And even if they weren't, we'd make it our business, son. You going to go along and tell your mama to wipe your nose or am I going to have to wipe it myself-with 'sploders. Now git!" He was certainly converting well today

"Up there, Tinoi. Search it and if they've got the missing one, haul her out. And then we'll see about the murder that's been done

here amongst our people.'

Tinoi, the shrunken one, hung back. He'd never had a taste for 600 mm. stuff himself. Let them as would be heroes, he valued his daily issue of doi.

Hippocrates saw the hesitation and grew very brave. He spanged a dozen sploders into the earth before the group and would have shot a thousand more as warning if the Scoutcraft Raider, ordered so, had not replied with a resounding vomit of fire.

The Morgue reeled as the screen folded. The top turret caved into tangled smoke. The side port fused and dripped alloy gone molten. And Big Lem Tolliver looked on in some annoyance for there went his chance of recovering the missing repossessed

The men went about collecting the hundred and fifteen and forming them into lines. They were bitter because they could not imagine what had burst these perfectly good chains and they had to tie lines through the broken links.
"Air!" moaned the prisoners.

"Stow it," said Big Lem. "We'll teach you to breathe air you didn't pay for. Form 'em up boys and get them on their way. That spaceship, or what's left of it, is a shade too hot for me."

"You ain't goin' to make me escort

them," said Tinoi. "It's a heck of a walk to Minga. I bought them Persephon-castes to

do the walking.

"If I say walk, you'll walk," said Big Lem. "And if I say walk straight out into space, you'll walk. And if I say hoof it from here to Galactropolis, you'll walk every condemned light-year of it barefoot. If I can't have my orders obeyed, who can? And if you can't obey Big Lem Tolliver, you can't obey nobody. Who thought up this company? Who makes it work? Who handles all the paper work and hires politicians and abdicates kings when chooses? Who keeps the whole confounded planet running and your belly full. Lem Tolliver, that's who. And what's Air, Limited, but Lem Tolliver? And what's Limited, Arphon but Lem Tolliver? And that makes me a planet.

This syllogism caused a return of good humor. He expanded, rocked on his heels and looked down at Tinoi. "Yessir. That makes me Arphon, or mighty doggone near.

Well, Tinoi, do you walk?

"Guess so, Arphon," grumped Tinoi and appeared very beaten about it. He knew better than to appear elated. Somebody else would have got the detail if he hadn't objected and it would be fine to breathe something else besides the ozone stink of the Scoutcraft Raider. Too, he could always sell a slave or two to some farm and turn in a death report. "Guess I'll have to," a death report. "Guess I'll have to," mumbled Tinoi, "but I'll need two gunners and a marine off the ship, and don't go making me take Connoly along."

"That's Connoly and two marines you'll get," said Tolliver. "Now line 'em up and

"Wait," said Tinoi, forgetting his elation about Connoly who could surely build them litters for the slaves to pack. He stared at the smoking side of the spaceship. "There's somebody alive."

And indeed it appeared to be the truth. Crawling backwards out of the smoke came a seared being, tugging at the boot of a second. Tinoi was all action. He swooped in, holding his breath against the fumes and snatched up the obviously live one.

Coughing and beating out a burning spot on his coat, he let her slide into the grass. "There's the missing one," he said. "Now

we can get on our way."

Big Lem looked down at her and made a disdaining face. She was very badly singed property, an enormous burn blotting out almost all of her face and destroying one eye. Wounded and bedraggled, it was plain that she would no longer gladden the eyes of man.

Tinoi looked at her tag, the one around her ankle, and then stared at the ear where the repossession tag should have been and was not. He looked at his boss. "This is Dotty Grennan, the one they picked up 'specially for you. She sure is spoiled for looks.

"Throw her into the line. Some men will

buy anything," said Big Lem.
"Don't guess she'll be able to walk much," said Tinoi.

"What's that to me? Throw her in. Captain! Captain! Here, you Foster. Get up there and tell my captain to send Connoly and two marines out here and stand by to take off."

The man named Foster leaped up into the Scoutcraft Raider with the message and came back shortly eating a chocolate bar to walk the line up.

"Air," moaned the slaves. "Air."

"Shut up, you repossessed mothers' sons," said Tinoi, beating them into line with the butt of his blastick. "Form up, form up or I'll give you a lot more air than you'll ever be able to use." He tried four times to make an old man stand on his feet and then left off profanity, and held an open hand toward Tolliver.

"I'll have to have a few charges," said Tinoi. "After all, it's bad enough to walk to Minga without having to drag a hundred and sixteen passed out repossessions.

"It's a waste of company money," said Big Lem. But he signaled Connoly as the big gunner came out of the Raider and Connoly went back for charges.

These were small cylinders with "A.L." painted in red on them, and when they were exploded around the slaves, sent off a greenish spray which hung foggily about them. Tinoi stepped clear and waited for the murk to dissipate and then, when the slaves had revived, turned to and lined them

up without further delay.

Big Lem watched the crowd move off. He knew Tinoi would probably be carried most of the way in litters made by Connoly and he understood what would happen to a couple of those younger girls. And he knew a dozen would be sold and reported dead. But Lem Tolliver could appreciate that kind of loyalty and wouldn't ever have understood another kind of man. He grinned as the last of them disappeared in the trees and without another look at the smoking spaceship, boarded the Scoutcraft Raider and took off.

An hour later Ole Doc came to himself lying in the grass where the girl had pulled him. For a little while he lay there and enjoyed the cool fragrance of the soft blades around him. It was quite novel to be alive

and to be so glad to be alive.

After a little he rose up on his elbows and looked at the Morgue. The alloy had stopped dripping and the smoke had cleared away, but the poor old ship looked ready for a spare parts house. The upper turret had been straight-armed back, a ten-foot hole lay under her keel and the keel was bent, and the near port had been melted entirely out of line.

And then he took heart. For she wasn't hulled that he could see and her tubes at one end and her Texas on the other were untouched. He started to spring up, but the second he put weight on his right hand it collapsed and he felt sick.

He looked down and saw that his palm was seared away and his wrist sprained or broken. He felt rapidly of his shoulders and chest. but his cloak had protected him there. One boot was almost seared off but his ankle and foot were uninjured. Aside from singes, his wrist and hand, he had survived what must have been a considerable conflagration. He came up swiftly then and went through the hot door. Small spirals of smoke were rising from the salon upholstery. One huge gold panel had curled off its mountings from heat. and a silver decanter was lying in a puddle on the charred rug, struck squarely by a ray translating itself through the hull.

But the young woman was gone and Ole Doc, looking back at the trampled meadow through the misshapen door understood suddenly how he must have got out there. No calloused space ranger would have tried to rescue him. Either the girl had tried or Hippo-

crates-

"Hippocrates!" "Hippocrates," "Hippo-

crates," echoed the empty cabins.
Ole Doc raced into the Texas and looked around: He went aft to the tube rooms and found them empty. And he had nearly concluded that they must have taken his little slave when he thought of the jammed turret.

The ladder was curled into glowing wreckage and the trap at the top had fused solidly shut from the impact of a direct hit. Ole Doc stood looking upward, a lump rising in his throat. He was afraid of what he would find

behind that door.

He went casting about him for a burning torch and was startled by a whir and clang in the galley as he passed it. In a surge of hope he thrust open the door. But little Hippocrates was not there. Pans, spoons and spits were just as he had left them. A bowl of gooey gypsum and mustard, the slave's favorite concoction for himself, stood half eaten on the sink, spoon drifting minutely from an upright position to the edge of the bowl as the neglected mixture hardened. A small, pink-bellied god grinned forlornly in a niche, gazing at the half-finished page of a letter to some outlandish world. The whir and clang had come from the opening oven door on the lip of which now stood the ejected cake, patiently waiting for icing, de-corations and nine hundred and five candles.

Ole Doc closed the galley softly as though he had been intruding on a private life and stood outside, hand still on the latch. For a long, long time he had never thought about it. But life without Hippocrates would be a

desperate hard thing to bear.

He swore a futile, ordinary oath and went to his operating room. His hand was burn-

ing but he did not heed it. There was an amputator in here some place which would saw through diamonds with cold fire. He spilled three drawers on the floor and in the blinding glitter of instruments finally located the tool.

It wasn't possible to reach the trap without taking away the twisted ladder and for some minutes he scorched himself on the heated metal until he could cut it all away. Then it occurred to him that he would have no chance of getting Hippocates down if there was anything left of him, for that little fellow weighed five hundred kilos even if he was less than a meter tall.

Ole Doc found rope and mattresses and then, standing on a chair, turned the cold fire on a corner of the trap He stopped abruptly for fear the excess jet would touch Hippocrates' body on the other side and for a while stood frowning upward. Then he seized a thermometer from his pocket and began to apply it all over the steel above him. In a minute or two he had found a slightly higher temperature over an area which should compare with the little slave's body and he chalked it off. Then, disregarding the former lines of the trap, jetted out five square feet of resistant metal as though it had been butter. The torch was entirely spent when he had but an inch to go but the lip had sagged from weight enough for him to pry down. A moment later he was crawling into the turret.

Hippocrates lay curled into himself as though asleep. He was seared and blackened by the heat of the melting girder which had

buckled and pinned him down.

Ole Doc hurriedly put a heart counter against the slave's side and then sagged with relief when he saw the needle beatbeat-beat in faint but regularly spaced rhythm. He stood up, feeling his own life surging back through him, and wrenched

away the confining girder.

Carefully, because he had never made any study of the slave's anatomy-which anatomy had been the reason Ole Doc had bought him at that auction God knew how many many scores of years ago, two centuries? three? -- Ole Doc trussed the little fellow in a rope cradle and by steadying the standing part over a split jet barrel, began the weary task of lowering the enormous weight down to the mattresses below.

It took a full twenty minutes to get Hippocrates on an operating table, but when that was done, Ole Doc could examine him in perplexity. Other than diet, which was gypsum, Ole Doc knew nothing about the

slave.

The antennae were not injured. The arms were bruised but whole. The legs appeared sound. But there was a chipped look about the chest which argued grave injury. Hip-pocrates was physician to himself and knowing this Ole Doc went back to the tiny

cabin off the galley.

He found some amulets which looked like witchcraft and a bottle which his keen nose identified as diluted ink with a medical dosage on the label. He found some chalky looking compresses and some white paint.

Completely beaten he went back and sat down beside the table. Hippocrates' heart

was beating more faintly.

His anxiety becoming real now, like a hand around his throat, Ole Doc hurried to the galley. He had seen Hippocrates tipsy a few times and that meant a stimulant. But it wasn't a stimulant which Ole Doc

The letter was addressed in plain lingua

spacia.

Bestin Karjoy, Malbright, Diggs Import Co.

Minga, Arphon.

By Transcript Corporation of the Universe charge U.M.S. O.D.M.

Dear Human Beings:

Forty-six years ago you had one Bestin Karjoy of my people doing your accounts. Please to give same Bestin this message. Hello, Bestin. How are you? I am fine. I have not been feeling too good lately because of the old complaint and if your father still employ with you you tell him Hippocrates needs to come see him and get some advice. My to come see him and get some advice. My master got birthday today so I give him happy birthday with nine hundred and five candles which surprise you for human but you know how big and famous he is and anyway I can come in a gig tonight and see you about down-dark halfway on park front because I don't know where you really live and your father. . . .

The cake must have demanded something

there for it stopped in a blot.

"At five dollars a word outer space rates!" exclaimed Ole Doc. But when he had read it through he was willing to have it at five hundred a word.

He hastened back to the operating table and put the gypsum and mustard close to hand, stacking with it water, the diluted ink and a call phone turned on to the band of his own, propping up a note:

"Hold on, old fellow. I'm returning with your friend Bestin or his father. I'll stay tuned on this phone."

His hand annoyed him as he tried to write with it and when the note had been placed he plunged his arm to the elbow into a catalyst vat and felt the painful prickling which meant a too fast heal. It would scar at this speed but what was a scar?

He saw that the gig, which had been on the side away from the blast, was uninjured, and he had almost launched it when he saw it would never do to go demanding

things in his present charred state.

Impatiently he threw on a new shirt, boots

and cloak and thrusting a kit and a blaster into his belt, lost no further time.

The gig was a small vacuum-atmosphere boat, jet powered and armed. It was capable of several light-years speed and was naturally very difficult to handle at finites like ten thousand miles an hour. Ole Doc went straight past Minga twice before he properly found it, glimpsed it just long enough to see the landing strip in the middle of town and put the gig down to paying at three hundred and eighty.

Ordinarily Ole Doc disliked middle-sized towns. They didn't have the chummy, "hellostranger" attitude of the pioneer villages of space and yet lacked any of the true comforts of the city. Built by money-hungry citizenry around a space repair yard such town were intent upon draining off the profit of the mines and farms incoming and outgoing. They were, in short, provincial. A rover port had some color and danger, a metropolis had comfort and art. Such as Minga had law and order and a Rotarian club and were usually most confoundedly proud of being dull.

And so Ole Doc didn't give Minga much of a glance, either passing over or walking in. Brick fronts and badly painted signshouses all alike-people all- But even Ole Doc in his rush had to slow and stare.

Minga was a city, according to the Space Pilot, of ninety thousand people where "a limited number of fuel piles, ice, fresh water, provisions and some ship chandlery can be obtained" and "repairs can be made to small craft in cradles with capacity under one hundred tons" and "the space hospital is government staffed by the Sun12 System Navy with limited medical stores available" and "two small hotels and three restaurants provide indifferent accommodations due to the infrequency of stopovers." Not exactly the sort of town where you would expect to see a well-dressed man of fifty carefully but unmistakably stalking a cat.

It was not even a fat cat, but a gauntribbed, matt-furred, rheumy-eyed sort of feline which wouldn't go a pound of stringy meat. But from the look on the well-dressed gentleman's face, there was no other reason than that.

Had he seen a riot, a golden palace, a ten-tailed dog or a parade of seals singing "Hallelujah," Ole Doc would not have been much amazed, for one sees many things strange and disorders unreasonable in a lifetime of rolling through the systems great and small. Ole Doc had been everywhere and seen everything, had long ago come to the conclusion that it wasn't even curious, but a well-dressed obviously influential old man engaging in the stalk of a mangy cat -well l

The gentleman had crept around the corner to pursue his game and now he had a fence for cover and with it was using up the twenty-yard lead the cat had had originally. In his hand the gentleman held a butterfly net and in his eye there was hunger.

The cat was unable to locate its pursuer now and stopped a bit to pant. It looked beleaguered as though it had been hunted before and the old gentleman had it worried. It crouched warily behind a post and condensed itself anew when it saw Ole Doc some thirty feet away. This new distraction was its undoing.

Soft-footed and alert, the old gentleman left the fence and crossed the walk out of the cat's range of vision. Too late the animal caught the shadow beside it and sprang to escape. There was a swish of net and a blur of fur, a yowl of dismay and a crow of triumph and the old gentleman, by twisting the net into a bag below the hoop, struck an attitude of victory.

Ole Doc started breathing again and walked forward. The old gentleman, seeing him, held up the prize.

"A fine morsel now, isn't it, sir?" said the old gentleman. "Been three solid weeks since we've dined on good, tasty cat. Don't yowl, my good rabbit avec croutons to be, for it won't do you a bit of good. My, my, my that was a long chase. Ten solid blocks and tortuous, too, what with thinking every instant some guttersnipe would leap out and snatch my prize from me. For I'm not as young as once I was. Dear me."

Ole Doc could see no insanity in the fellow's eyes nor find any fault other than this enthusiasm, for dining on mangy cats. But, he decided suddenly, this was no time to follow the quirks of the human mind. Serious business—very serious business—was waiting for him in the wrecked hull of the Morgue. He glanced anxiously at his radio pack. The tic-tic-tic of the heart

counter was very slow.
"Sir," said Ole Doc, "while I can't share your enthusiasm for cat on toast, I could use some of your knowledge of this town. Could you tell me where I might find a company known as Malbright, Diggs? They import, I think, and have their main office here in Minga."

At this the old gentleman stopped admiring his capture which was now entirely subdued. "Malbright, Diggs. Bless me!" And he removed a pocket handkerchief and blew his nose heavily. "You won't be from any town on Arphon, then."

'Be quick, man. Where can I find any

member of that firm?

The old gentleman blew again. "Well," he said, "if you've a mind for fantasy, you might try looking in heaven and then again, as their creditors would have had it, in hell. One place or the other I dare say you'll find my poor old billiard companion

Malbright and his sad little partner Diggs. But Arphon isn't hell, sir. Indeed it's two stops beyond."

"The firm has failed, then. Where was it located?"

"Oh, the original Malbright, Diggs has failed, sir. But it's Air Limited you'd have to approach to get any trace of their affairs. Malbright was the cause of it you see, poor chap. Got to needing more and more air and couldn't pay the bill out of his share. And he took to . . . well," and here he blew his nose again, "from the till you might say and one day the firm failed. Poor Malbright. Had to have the air, you see. Couldn't pay the bill. And as it was a partnership, Diggs stood ready but unable to settle the accounts. And that was the end of it. A fine, thriving business it was, too, until Malbright took to needing air. But it's all gone, all gone." And he looked around him at the autumn day as though the dismal winter snows lay heavily over the streets.

Ole Doc frowned, "Air? What nonsense is this about air. Short time ago I heard something of it. But I haven't any time. You'll remember a small extraracial clerk that Malbright had, then. Probably fourhanded. Name of Bestin Karjoy-

"Oh, dear me, no. Malbright and Diggs must have had a thousand clerks. Business ran into the billions of tons per annum, you know. Customers all over the system. Fine, rich company. Poor Malbright. And he honked again on the handkerchief.

Ole Doc was impatient. "How could a firm like that fail just because one partner needed a little air. Why, man, the whole sky around here is full of it. Air!"

"I beg your pardon, sir," said the old gentleman, shocked. "I beg your pardon." And before Ole Doc could think of further questions, the old gentleman hurried away, clutching his precious rabbit soup in the form of a very mangy cat, and was gone.

Ole Doc's boots were angry on the pavement. He was struck now, as he looked for signs, with an air of decay and unhappiness about the town. There were people here and there but they were listless and incurious like beings who have been hungry too long or who despair of any hope. Store windows were clutters of dusty junk. The theater marquee was advertising the personal appearance of a singer ten years dead. Shutters groaned in the faint wind and stairs staggered in crazy disrepair. The town looked like it had been sacked and repeopled with

There was a city park ahead, a pitiful little thing of broken fountains and root-cracked walks and Ole Doc saw two dogs slinking through it, wary like hunted beasts, sniffing

hungrily at refuse.

The town, he realized with a start, was starving. The children he saw in a doorway were bloat-bellied and unpleasant. Ole Doc

turned toward them and they made a sorry effort to run away. He peered into the interior of the rickety dwelling and saw that they were now clustered around the bed of a woman who might, in other stages of economics, have been comely.

She saw his shadow and turned. Wearily she tried to motion him away. "No. No more. . . I can't . . . I can't pay."

This was definitely his business but he

thrust it aside. "Madam, I am not trying to collect money. Here is a gold coin," and he dug one from his money pouch and placed it courteously on the table. "I want to find a man, an extraracial being of four hands, named Bestin Karjoy. Direct me to some one who will know and you shall have my deepest thanks."

She managed to understand this and then made a motion at her eldest boy. Jimmy. Go show him what he wants." But she looked suspiciously at the coin as she

picked it up.

Ole Doc winced when he saw how close to the skin her bones were. He pulled small hypo gun from his pocket, fumbled in his kit and loaded it with slugs. The jet it shot penetrated without pain and he triggered it six times before he left the room. They didn't know they had been force fed and only stared in awe at the small gun, afraid it might be a blaster.

Ole Doc motioned to the eldest and went back into the street. But he might have found

the place himself.

It was a great, gold-fronted building before which lounged Persephon guards. And over the top of the door was the mighty legend, "Air, Limited," and on the panel, "Big Lem Tolliver, Savior of Arphon."

Ole Doc gave the boy another gold coin and then breasted the guards. They stopped him with guttural grunts and were about to argue in earnest at his pressure when they both came up rigid, staring straight ahead. Ole Doc put the hypo gun back into his pocket, looked hard at the guards to make sure the rigor had set good and hard and would stay for a while and walked on in.

A clerk came up. "This is a private office, sir. The general entrance for the payment of taxes. rental and bail is next door.

Besides-"

"I want to see your records," said Ole Doc. "I am looking for an extraracial man named Bestin Karjoy and no second-rate town like this is going to stop me. Where are your records?"

Fatally, the clerk had new objections. There was a small snick and Ole Doc put the gun back into his pocket. "You are a trained clerk and obedient to one Lem Tolliver. It is the will of Tolliver that you find the name Bestin Karjoy in your files and give me the address.'

The narco slug had bitten straight through

the modish waistcoat and pink silk undershirt. "Yes sir. Coming right up, sir. Won't keep you waiting a minute, sir. What Big Lem wants-"

"Who says Big Lem wants anything?" came hugely from the door. "I," he said waddling closer, chin outthrust, "do not like gents who go around spieling off orders I ain't issued. Now, whoever you are, let's hear just why you impersonate a messenger for me.

Ole Doc looked at him rather wearily. He gripped the hypo gun in his pocket, but he never got a chance to use it. Some sixth sense told one of Tolliver's bodyguard that an attack was imminent and Ole Doc was seized from behind and held hard while the contents of his pockets were turned out by Tolliver.

The small meters and instruments, the minute boxes of pellets, the hypo gun itself, these meant nothing to Tolliver or anyone around him. But the gorget meant something— The solid gold ray rods of the U.M.S. which were chained to Ole Doc's throat in such a position as to protect the most vulnerable point of the jugular. Tolliver tried to yank it off, failed to break the chain and so had to stare at it.

"U.M.S.," said Tolliver. "Huh."

A clerk had come in to aid his fallen brother of the files and inkpots for the first one, under the stimulus of the narco slug and crossed orders had quietly fainted away. "Universal Medical Society," said the new clerk. And then he realized what he had said and jumped back, letting his brother clerk fall. He stared, mouth agape, at Ole

"Univ—" began Tolliver. And then his face went a little white. He bent as he stared at Ole Doc. Then, dismissing it. "He'd imitate a messenger, He'd pretend anything. He ain't no Soldier of Light. Where's the crowd-

with him?"

"They ... they operate alone," said the second clerk. "I . . I read in the Universal

Weekly that they-

"Bosh! What would they care about Arphon? U.M.S.," blustered Tolliver, "is strictly big time. He'd never land here. Listen, you whatever-you-call-it, don't give me no stuff about U.M.S. You're here for graft and I'm on to your game. Now, let's see how good you are at crawling out of your lie. Go on, crawl!"

Ole Doc sighed. He had seen such men before. "I suppose I am addressing Lem

Tollander.'

"Tolliver!"

"Lem Tolliver, then. President or some

such thing of Air, Limited.'

"Correct, And you come here for a shake-down. Listen—" And then he stopped and looked at a new thing in the contents of the pockets. It was a slave ear tag. "Ah," he said, snatching it up from the desk, "you've

been tampering with company property already. Oh, yes. That girl—so you were in that ship we blasted a few miles east of Minga, huh? Say, buddy, don't you know where to stop? A guy'd think you were kind of confused. You've already lost an old tub of a space tramp, and lucky you got out with yourself in one chunk. What kind of nerve is this-

"Oh, do be quiet," sighed Ole Doc. The flood of speech was suddenly dammed. It had been years and years since anyone had said such a thing to Big Lem Tolliver. Judging from the attitudes struck by the men in the office at this blasphemy, it was going to be years and years before anyone tried to say it again, too.

But Big Lem was a man of many convictions and foremost amongst them was a decided prejudice in favor of his own vast greatness. He had been honeyed and buttered and siruped so long by fawning menials that he had forgotten there were other ways to talk.

Big Lem looked more closely at Ole Doc. "Who are you anyway?"

You seemed convinced of something else

a moment ago. I'm a doctor.

"Ah," said Big Lem. He brightened and rubbed his huge paws together. "A doctor. A crooked doctor impersonating a U.M.S. soldier. Ah."

The whole thing was opened to a page he could read. He scooped up the print. This fellow had come here for a shakedown, impersonating a Soldier of Light. And because men are likely to best understand what they themselves actually are, Hig Lem Tolliver was utterly satisfied.

Grinning, the president of Air, Limited, had his men search the visitor for other weapons and equipment and then with every cordiality, ushered Ole Doc into an office big enough for a ballroom and ten times as fancy.

"Sit down, sit down," said Big Lem, sprawling into the oversize chair behind his king-size desk. "Know very much about

doctoring?

Ole Doc played it patient, stilling the urgency he felt now that his small pack radio had been taken from him. He sat down in a high-backed leather chair. "Others no doubt are much better informed," he sighed.

"Where and when did you pick it up? "Well . . . a very long time ago. I may not know as much about modern medicine as I

might.

Went to school maybe?"

"Yes. But it was a long time ago."

"Sure, sure. And probably got kicked out of the profession for some . . . well, we all make mistakes and recovery isn't possible unless one uses his wits." He winked ponderously and laughed much beyond the need of it. "I tell you, doc, you wouldn't think

to look at me that I was just a typical transsystem tramp once. Look around. Them hangings cost a fortune and them pictures is worth a cold five million. They're originals and if they ain't and I ever find out about it, God help my agents." He laughed again. "Well, doc, I guess you're wondering why I'm being so great about this thing, huh?'

Somewhat'

"You're a cool one. I like that. I like it very much. Well, I tell you. I could use a doctor. I don't need a good one, see. You'll do just fine if you know anything at all.

I thought there were doctors here. "Them that was here up and went away." He enjoyed a brief chuckle sobered, "I had a doc as partner. He'd been a good one in his day but drink and women had got too much for him. He died about five years back and we been kind of isolated for some time, like. So, I can use a doctor. A doctor that ain't all knocked around by professional ethics.'

And what's in it for him?"

"Thousands and thousands and thousands. Oh, I can pay all right. And pay very well indeed. Taxes, fees, sales . . . I can pay. Air, Limited, is just about as sound a concern as you'll ever find, my friend." He beamed jovially. "You give me quite a turn with that thingum-a-jig on your throat. The U.M.S.— Well, you knew how to back up a play. If I thought you was on the level, you wouldn't be sitting there, but I know you ain't. Not an honest pill in your pockets. No stethoscope. A blaster. Oh, I can tell a thing or two."
"Where'd I slip up?" said Ole Doc in-

nocently.

"Why, the blaster of course. The U.M.S. is death on violence. Oh, I've studied up, I have. And I figure the chances of one of their big patrols coming this way is about ten million to one at least in this century. We ain't nothing on Arphon and Sun12 is gone to pieces as a confederated system. We don't spread no germs around and we ain't in any kind of quarantine. So they won't come. But if one of them big gold ships with the hundred men crews come around, why I want to be reasonable. So that's where we talk business. You seem to know the ropes."

"Yes," said Ole Doc. "One has to understand his fellow man to get along. Just why

are you worried?"

"Well, doc, it ain't so much the U.M.S. Them Soldiers would never come here and wouldn't stay if they did. No, it's the way taxes have fallen off. I want you to do something about it. People don't pay their taxes. And then there's the fees-

"Wait. Are you the government?"

"Well, in a way, yes. At least there ain't any other government on Arphon just now and we're a big commercial outfit. So, well we collect taxes for the machines." "What machines?"

"The health machines of course." And

here Big Lem began to laugh again.

"Maybe we can do business of one kind or another," said Ole Doc. "But there's one thing I've got to fix up. I want to get hold of an extraracial being named Bestin Karjoy. You let me find him and then I'll come back-

Big Lem looked sly. "Some old partner in crime, eh? Well, doc, if that's what you want, you'll get it."

"Now," said Ole Doc.

"When we've settled a thing or two," said

Tolliver. "You'll work for me?"
"We'll settle this when you've found this Bestin Karjoy for me," said Ole Doc. "It won't wait.

"I'm afraid it will, my friend. Will you

sign on?"

I'd have to know more," said Ole Doc, restraining a blow-up with difficulty and holding on to his cunning.

Such as-

"What taxes? What air? What are you doing?"

"We sell air," said Tolliver. "We sell it in small bombs or in cans and we get a hundred dollars for a flask big enough to keep a man a month. Now that's legal, isn't

"Why air?"

"Why not?" said Tolliver. "Men have to breathe, don't they?

"What taxes then?" said Ole Doc.

"Why, the taxes to keep the machines running. Didn't you see the big machine central when you came into town?

'I wasn't looking closely," said Ole Doc. "Well, that's just one. We got hundreds all over the planet. And we keep them going so long as the citizens pay the tax. And when they refuse to pay it, well, we get 'em to put up a bond. And-"What kind of a bond?"

"Personal liberty bond, of course. If we don't collect when it's due, then the man's liberty is over and he's repossessed by us."

'Why do you want him?"

"Slaves, of course. Nine-tenths of the people on this planet would rather be slaves than have the machines stop. So there we

"You mean nine-tenths are slaves by this action. See here, Tolliver, what do the

machines do?'

"Why, they keep the outer spacial gases from settling down and killing people. The gases ruin the oxygen content of the air. So we run the machines and keep the gases going up, not down. That's simple, isn't it? And the air bombs we sell let men breathe when they've been hit by the gases too much."

"What kind of gases?"

Tolliver looked shrewdly at Ole Doc. The

crook, thought Tolliver, was pretty intelligent. Well, all the better. "That's where I need an expert," said Tolliver. "Now if you'll just join up and take orders-

"Let me look this thing over first," said Ole Doc. "Money is money but it just may

be that I can't do a thing about it.

Suspicion was a fine quality to find in a man. Tolliver reared up and was about to call when Tinoi, sweating hard from his walk, scuttled in. He saw Ole Doc and left his prepared report unsaid.

"New recruit," said Tolliver. "They all get here, Tinoi?"

"About twelve died on the way in," said Tinoi. "Them Persephons don't have good sense when it comes to driving-

"How much did you get?" said Tolliver. Tinoi looked aggrieved and his boss

laughed.

Well, put them in a stockade and . . no, wait. Here. Take this man around and

let him look the place over."

Tinoi twisted his head sideways at Ole Doc in suspicion, and then he caught a secret gesture from Tolliver which said, "Watch him, don't let him see too much, kill if he tries to get away."

"I need this man," added Tolliver.
Ole Doc rose. "If you'll let me know
where I can find Bestin—"

"Later, later. Take him along, Tinoi."

Outside Ole Doc tried to regain his weapons and was refused. He would have made a stronger bid if he had not just then seen the slaves waiting before the door.

They were groveling in the dust, lying prone with exhaustion or looking in dumb misery at the huge gold office building which was their doom. These were the same slaves Ole Doc had seen earlier for there was the same grizzled ancient, coughing and whining in their midst, "Air! Air!"

Ole Doc took half a dozen strides and was outside. He saw what he was looking for and went sick inside. There she was, lying on a litter, moaning in semi-consciousness, twisting with fever. The beauty of her was spoiled and her spirit was shredded with pain.

With another pace, Ole Doc tried to approach her. He knew how she had been burned, why he had been lying outside in the grass. Connoly was standing hugely in

his way, lordly drunk by very positive.
"Nobody gets near them slaves," said
Connoly. "Orders."

"Come back here, you," said Tinoi. He scuttled down the steps and grabbed Ole Doc from behind.

Ole Doc offered no fight.
"Who's this bloke?" asked Connoly,
when they had him back at a decent distance.

'Recruit, the boss said. Just what we don't need is a recruit," grumbled Tinoi. "Too many splits now. Too big a payroll. Connoly, you run these pigs into the stockade. got to play nursemaid to this kid here. Never get to rest. Never get a drink. he trailed off. "Come on, you. What are you supposed to do?'

"I'm supposed to repair the machines,"

said Old Doc.

"Well, come on, then." He scuttled away

and Ole Doc followed.

The machine was above eye level which was why Ole Doc had missed it. It was a huge, gold drum and it stood squarely on top of the office building. They went up to it in an elevator and found it humming to

Ole Doc had pulled his dome on from some instinct. But he was surprised to find Tinoi getting quickly into a mask before he

stepped out of the elevator.

"What's wrong with it?" said Tinoi. Ole Doc spoke at urgent random. "The

rheostats.'

"The ... well, you know your business, I guess. There's the port and there's the vats. You work and I'll stay here and rest. Walk 'a man's legs off and then don't even let him drink. Keep your hands out of the vats, now."

"I'll need some of the things I left in

the office," said Ole Doc.

Tinoi went to the phone and called and presently a clerk came up with them in a paper bag. No pellets, no hypo gun, no blaster—Ole Doc spread out his small kit.

"Don't look like tools to me." "I'm a chemist," said Ole Doc.

"Oh, I get you. I told him the mixture was too strong. I even get it."

Ole Doc smiled and nodded. "We'll see." He gingerly approached a vat in the dark interior. On looking around he found a simple arrangement. There was a centrifuge in the vat and a molecularizer above it and then there were ports which carried ionized beams out into the surrounding air. He stepped up and saw that a constant stream of fluid in very tiny amounts was being broadcast through the jets to be carried by the wind all around the countryside. He went back to the vats.

With a drop of the mixture on a filter, rapidly ruled out virus and bacteria with a pocket analyzer. Intrigued now, he made a rapid inspection for inorganic matter and was instantly in the field of naturally produced plant secretions.

He took a bit of "synthetic skin" from his case and got a very violent reaction. On the grid, the thing was an allergy pro-duct of a plant. And when he had run through twenty alkaloids, working slowly because of his impoverishment in equipment, he knew what it was.

Ragweed pollen!

He went outside and looked thought-

fully at the town below.

The beams were sufficient to carry jets

of it far beyond the town limits and the winds would do more. To the east was a large expanse of greenhouse glass and a monocular told him it was surrounded by Persephon guards and a high, electrified fence. Comon sense told him that ragweed was grown there in large quantities.

"Well?" said Tinoi. "Ain't I ever going

to get that drink?"
"You were right," said Ole Doc. "It's too

strong. I'm satisfied. Let's go."

Tinoi grunted with relief and started down. Then he changed his mind and stood aside to let Ole Doc into the elevator first. But Tinoi went just the same. He went very inert with a beautiful uppercut to hoist him and lay him down against the far wall.

Ole Doc rubbed his gloved knuckles as he turned Tinoi over with his foot. The cranial structure told him much. Tinoi had been born and bred in the slums of Earth.

"Ragweed," said Ole Doc. "Common, ordinary ragweed. And the older a race gets the more it suffers from allergies. Tinoi, Connoly, Big Lem himself-Earthmen." was searching Tinoi's pockets now and he came up with a drug so ancient and common that at first he didn't recognize it and thought it was cocaine.

The analyzer set him right. "Benadryl!" said Ole Doc in amazement, "Ragweed, and here's benadryl: Earthman to begin with and not very susceptible. Benadryl to keep him going and to prevent a serious case of asthma. Air—asthma—oxygen for asthma, benadryl for asthma- But it can't

be air in those bombs. It wasn't benadryl."

He pushed "Basement" and descended. The door opened on a storeroom guard. He took Tinoi's blaster and put a neat and silent hole through the Persephon guard who stood outside the basement storeroom. The guard had alerted, had seen the body on the floor when the elevator opened and had not had time to shoot first. Ole Doc shot the lock off the storeroom door.

And it was there that he came afoul of

another ancient custom.

A bell started ringing faintly somewhere in the upper regions of the building. For a moment he was not alarmed for he had safely by-passed all the offices in the eleva-tor. And then he saw a wire dangling, cut yb the opened door. An old-fashioned burglar

He grabbed up a black bomb with its A.L. lettering and sprinted for the elevator. But the door closed before he got there and the car went up without him, carrying Tinoi's

unconscious message.

Old Doc was shaken into the mistaken idea that this place was further guarded by gas for he began to sneeze. Then he saw that his helmet was not sealed tight and hastily repaired it. Ragweed. He was sneezing from the solution of pollen which still stained his glove. A heavier dose would have left him gasping and as it was his eyes watered and he staggered as he fumbled for the stair door.

It crashed toward him and three Persephons leaped out of the areaway. It was not fair to them just as it had not been fair to their brothers that morning. Ole Doc gripped the searing-hot blaster, picked up the weapons of the first fallen one, stepped over the other two bodies and started on up the stairs. The top door was locked and he shot it open.

The clerk screamed and thrust back away from him for they saw murder in his old-

young eyes.

Big Lem was frozen in his office entrance. The burglar alarm gonged clang-clang-clang with furious strength over them all.

'What's in this?" shouted Ole Doc, thrust-

ing out the bomb.

'Put that gun down!" bawled Tolliver.

"What the devil's wrong-

Ole Doc heard in his keyed up phone the tiny whisper of leather above the clanging gong. He spun sideways and back and the shot intended for him fired the wood beside Big Lem Tolliver.

Connoly the gunner was ponderously wheeling for a second shot. Ole Doc snapped a quick one across his chest. Connoly's face vanished in a dirty black gout of smoke. He somersaulted backwards down the front steps and landed, dead but still writhing, in the midst of the slaves he had not had time

to herd away and now would herd no more. Ole Doc was still skipping backwards to avoid a counterattack by Big Lem. The elevator door clanged shut and Tolliver was gone.

Ole Doc headed for the stairs and took them four at a time, cloak billowing out behind him. He had wasted too much time already. But he couldn't leave this building until— They weren't on the second floor. Nor the third. But the switch box for the elevator was. Ole Doc shattered its smooth glass with a shot and finished wrecking it with another. Voltage curled and writhed and smoke rose bluely.

That done he went on up with confidence. The only Persephons he found fled down a fire escape in terror. Ole Doc went on up. The roof door was barricaded and he shot

it in half.

Big Lem Tolliver might have been the biggest man on Arphon but he didn't have the greatest courage. He was backing toward the "machine" and holding out his hands to

fend off a shot as though they could.
"You're not playing fair!" he wailed. "You see the racket and you want it all. You're not playing fair! I'll make it halves—"

"You'll face around and let me search you for a gun," said Ole Doc. "And then we'll

get about our business. You've violated—"
"You want it all!" wailed Tolliver, backing through the door of the dome. He tried to shut it quickly but Ole Doc blew the hinges off before it could close.

The shot was too close for Tolliver's nerves. He leaped away from it, he stumbled and fell into a vat.

He screamed and quickly tried to grab the edge and come out. Ole Doc stopped, put down the bomb and dropped a stirring stick

to the man's rescue.

Tolliver grabbed it and came out dripping, clothes with green scum running off them, hanging ridiculously upon him. The man hanging ridiculously upon him. The man was trying to speak and then could not. He clawed at his eyes, he tried to yell. But with each breath he sucked in quantities of poison and his tortured skin began to flame red under the scum.

Ole Doc threw the bomb at his feet where it burst in bright green rays. He expected Tolliver to breathe then, wreathed in the climbing smoke. But Tolliver didn't. He fell down, inarticulate with agony and lack of breath and within the minute, before Ole Doc could find means of tearing the clothes from him and administering aid now that the "A.L." air bomb had not worked at all, Big Lem Tolliver was dead. In the elevator Tinoi still lay, struggling

now to come up from his nightmare. When he saw Ole Doc standing over him, Tinoi's own gun in hand, the lieutenant of the late Air, Limited, could not be convinced that any time had passed. But he was not truculent, not when he saw Tolliver's body. He could not understand, never would understand the sequence of these rapid events. But Tolliver was dead and that broke Tinoi.

"What do you want wif me?" he sniveled.

"I want you to set this place to rights eventually. Meantime, shut off that confounded machine and come with me." Tinoi shut it off and the ripples in the

vats grew still. Ole Doc hiked down the steps behind the cringing Tinoi and so into the main offices on the ground floor. The clerks stared at the cringing Tinoi.

"You there," said Ole Doc. "In the name of the Universal Medical Society, all operations of Air, Limited, are ordered to cease. And find me this instant the whereabouts of Bestin Karjoy, extraracial being.'

The clerks stared harder. One of them

fell down in a faint.

"The Univ The Universal Medical Society..." gaped another. "The real one I told him I thought he was a Soldier," whimpered the clerk who had first announced it. "When I read that article-Now I'll never get my weekly check-

Ole Doc wasn't listening. He had Tinoi and another clerk by the collars and they were going down the steps, over the dead Connoly, through the moaning slaves and up the avenue at a rate which had Tinoi's feet half off the ground most of the way.

At ten thousand miles an hour, even freighted with her passengers and the thousand kilos of Bestin and his antennaewaving father, the gig did not take long to

reached the injured Morgue.

Bestin's father was making heavy weather of trying to unload the bundles he had brought when the gig landed and Ole Doc hurriedly helped him. The old extraracial being hobbled on ahead into the operating room of the Morgue and then, when Ole Doc would have come up he found himself heavily barred outside by eight hands. The door clanged shut, didn't quite meet at the bottom, bent and was shut anyway.

Ole Doc stood outside in the trampled grass and stared at the Morgue. The girl on her stretcher was forgotten. Tinoi and the clerk might as well have been grass

Tinoi grumbled. He knew that he could run away, but where could he run to escape the long arm of a Soldier of Light? "Why didn't you tell me?" he growled at the clerk. "You punks are supposed to know everything—"

"Be quiet," said the clerk.

There was a sound inside as of plumber's tools being dropped. And then the clatter of pipes. A long time passed and the sun sank lower. Ole Doc came out of his trance and remembered the girl.

She was moaning faintly from the pain of her burns.

Ole Doc timidly knocked on the door of his operating room, "Please. Could I have the red case of ointments on the starboard

He had to ask three times before Bestin's two right arms shot impatiently out with the red case. Ole Doc took it and the door clanged shut again.

The girl shuddered at the first touch and then a hypo pellet quieted her. Ole Doc worked quickly but absently, one eye on the ship. Tinoi gaped at what Ole Doc was

doing and the clerk was ill.

The girl did not move, so strong was the pellet, even when half the skin was off her face and arm. Tinoi had to turn away, rough character though he called himself, but when the click and scrape of instruments didn't sound again, he faced back

Ole Doc was just giving the girl another shot. She was beginning to stir and turned over so that Tinoi could see her face. He gaped. There wasn't a trace of a scar, not even a red place where the sear had been And the girl was very, very beautiful. "Feel better?" asked Ole Doc.

She looked around and saw the clearing. She recalled nothing of the in-between. She did not know she had been to Minga and back and thought she was that minute finished dragging Doc from the burning ship. She sat up and stared around her. It took a little soothing talk to convince her of what had happened.

She saw Ole Doc's mind was not on

what she was saying nor upon her and she soon understood what was going on in the

Some one you like?" she asked.

"The best slave any man ever had," said Ole Doc. "I recall . . ." But he stopped, listening. "The best slave a man ever had," he finished quickly.

The sun sank lower and then at last the clicking and chanting inside the ship had stopped. The door opened very slowly and the old man came out, carrying his clumsy bundles. He put them in the gig. In a moment, Bestin came down the twisted ladder and walked stolidly toward the gig.

Ole Doc looked at them and his shoulders sagged. He rose and slowly approached

the old being,

"I understand," said Ole Doc, finding it difficult to speak. "It is not easy to lose . . . to lose a patient," he finished. "But you did your best I know. I will fly you back to

Min-

"No, you won't!" howled Hippocrates, leaping down from the Morgue. "No you won't! I will do it and you will tell those two stupid humans there and that woman to put things to rights in that ship they messed up. Put them to rights, you bandits! Wreck my Morgue, will you! She's more human than you are!"

He shook four fists in their faces and then turned to beam affectionately at Ole Doc.

The little fellow was a mass of fresh plaster of Paris from neck to belt but otherwise he was very much himself. pipes," he said. "Whooeee whoooo whoooo!" he screamed, deafening them. "See? New pipes."

Ole Doc saw and heard. He sat down on the grass weakly and began to laugh. Hippocrates was offended. He did not know that this was from the shock of his own near demise, from the close shave of never getting aid to him. He did not know that the biggest swindle in a thousand systems had had to relax its wealthy sway before he could be cured. He was offended.

"Clean up that ship!" he shouted, jumping into the gig. "And as for you," he declaimed, pointing at his beloved master, "don't you touch that cake. The birthday party will be at six. You invite girl but those stupid humans, never! I go'now. Be right back."

And the gig shot tremendously away.

Ole Doc wiped away the tears of near hysteria and took one of his own pills. He got up. "You better do what he says, people. And as for you, Tinoi, tomorrow morning we'll shut off and destroy those 'machines and get this planet running again. Jump now. You heard him.

The clerk and the girl—who gave Ole Doc a lingering, promising glance entered the ship to begin their work. But Tinoi lingered. Better jump," said Ole Doc.

"Sure. I'll work," said Tinoi, "But one thing, Mister Doctor . . . you're a Soldier of Light and I ain't even good enough to talk to you, I know. But—"
"Well?"

"Sir," plunged Tinoi. "It's them bombs. We had our allergy pills, but them bombs was pretty good, too. If they're so expensive to make like he said, how'll we ever get

enough to cure up-

"My man," said Ole Doc, "your precious bombs were one of the oldest known buncombes in medical history. A propellant and ephedrine, that's all. Ephedrine barely permits the allergy patient to breathe. It wasn't 'air' you were selling but a phony, secondrate drug that costs about a dollar a barrel. They'd take a little and needed more. You were clear back in the dark ages of medical history—about a century after stopped using witches for doctors. Ragweed, ephedrine—but they were enough to wreck the lives of nearly everyone on this planet.

"Oh, get into the ship and get busy. It makes me sick to think of it. Besides, if Hippocrates gets back and finds his Morgue still messed up, he'll make you wish you'd never been born. Jump now, for by all that's holy, there's the gig coming back now.'

DREAMS ARE SACRED

(continued from page 33)

How can you apologize to a girl when she doesn't even know that you owe her an apology? She hadn't been asleep, so she couldn't have dreamed about the skirt incident. And if she had-she was Craswell's dream, not mine. But through some aberration a trickle of thought-waves from Blakiston's machine had planted an unreasoning antipathy to me in her subconscious mind. And it would need a psychiatrist to dig it out. Or-

I phoned Steve from the club office. He was still chewing. I said: "I've got some intensive thinking to do-into that machine

of yours. I'll be right over.

She was leaving the microphone as I passed the band on my way out. I looked at her hard as she came up, getting every detail fixed.

'What time do you go to bed?" I asked. I saw the slap coming and ducked. I said: "I can wait. I'll be seeing you.

Happy dreams."

DANCE OF A NEW WORLD

By JOHN D. MacDONALD.

If you can't find the man who can do the job that has to be done—there's always one answer!

SHANE BRENT sat in the air-conditioned personnel office of the Solaray Plantations near Allada, Venus, and stared sleepily at the brown, powerful man across the table from him. Shane was an angular blond man, dressed in the pale-gray uniform of Space Control. On his left lapel was the interlocked C.A. of Central Assignment and on the right lapel was the small gold question mark of Investigation Section. Shane Brent had the faculty of complete relaxation, almost an animal stillness.

His hair was a cropped golden cap and his eyes a quiet gray. Below the edge of the gray shorts the hair, tight curled on his brown legs, had been burned white by the

The man on the other side of the table was stocky, sullen and powerful. His face was livid with the seamed burns of space radiation before the days of adequate pilot protection. His name was Hiram Lee.

The conversation had lasted more than an hour and as yet Shane Brett was no closer to a solution. He had been carefully trained in all the arts of persuasion, of mental and emotional appeals. Hiram Lee had resisted

them all. Shane Brett said: "Lee, the whole thing is ridiculous. You're thirty-eight now. At least seven years of piloting ahead of you."
Lee snorted, "Piloting! Tell your boss that I'm unadjusted or something."

"Let's review the case again. You, at the age of eighteen, were the first third-generation space pilot in history. Your grandfather was John Lee who was an army pilot and who ran out of soup on the second swing around the Moon. As a memorial they left the little silver ship in orbit.'

Lee's expression softened for the first time. "That's the way he would have wanted it."

And your father, David Lee, was kicked off the spaceways for getting tight and balancing the old Los Angeles of the Donnovan Lines on its tail fifty feet in the air for ten minutes."

"And he won his bet of fifty bucks, junior.

Don't forget that."

And that brings us down to you, Hiram Lee. You made eighty-three trips with Space Combo in the VME triangle. Your education cost Central Assignment a lot of time and money. There aren't enough trained pilots who can stand the respon-sibility."

The monotony, you mean." Lee stood up suddenly, his fists on his slim waist. "I told you before and I'll tell you again. When I started, it was a fine racket. You took off on manual controls and got your corrections en route from Central Astro. You made the corrections manually. You ripped off in those rusty buckets and the acceleration nearly tore your guts out. When I started we had a mean time of one five nine days from Earth to Venus. The trip was rugged. As a pilot you were somebody.

Then some bright gent had to invent the Tapeworm. Central Astro plots your entire trip and sends the tape over. You coordinate the Tapeworm with takeoff time and feed in the tape. You've got a stand-by Tapeworm with a duplicate tape and you've got an escape tape which you feed in if any-

thing goes too far off.

The pilot sits there like a stuffed doll and the tape does everything. You don't even have to worry about meteorites. The Pusher obliques the little ones off and the Change-Scanner gives you an automatic course cor-rection around the big one. It just got too dull, Brent. I'm not a guy who wants to play up to the rich passengers and tickle the babies under the chin and say kitcheekoo. I took three years of rocking chair circuits and then I quit. And I won't go back."

"What makes the job you've got so attractive, Lee? You're just a foreman and nursemaid to a bunch of Harids working in your

herb patches.'

Lee smiled tightly. "I keep 'em working and I tell 'em what to do and I try to keep them happy. You know the final psycho report on them. Their culture is much like the culture of ants on Earth—with one exception. They have a high degree of emotional instability. Did you ever see a Harid run berserk? A bunch of them are picking away and all of a sudden one will. stop and start swaying his head from side to side. The others light out for far places. The one who has gone over the edge starts clicking those teeth of his. He lets out a scream that would split your head wide open and comes at you with his arms all coiled to strike. Bullets won't stop them. You haven't got time to mess with a powerpack and turn

a ray on him. All you need is a knife. You just step inside the arms, slice his head clean off and get out of the way fast. See this scar? I didn't move fast enough six months

Shane looked puzzled. "Then danger is an integral part of your pattern of living. Are you trying to tell me there's no danger in

"It's a different kind, Brent. Once every few years a ship gets it. The people on it don't even know what happened. I like a little danger all the time.

'Would you consent to an alteration of glandular secretions to take away this yen

for danger?'

"And start kissing babies again. Not a chance! Every Saturday I draw my pay and I hit all the joints along the Allada Strip. You meet some interesting people. All Sun-'day I have a head and a half. On Monday I'm out in the weeds again with my crew of Harids.

"Central Assignment isn't going to like my

report on this.

Lee chuckled. "I sure weep for you pretty boys in gray. Tell them to mark my file closed and tell them where to file it for me,

will you?

Shane Brent stood up slowly, looking more than ever like a big sleepy animal. "Suppose, Lee, that you could take a route on one of the old ships? Manual controls, magnetic shoes, creaking plates-all the fixings.

Lee stared down at the table top for a few seconds. He said softly: "Nothing in this world would keep me out of space,

brother. Nothing!"

Shane Brent asked: "And what if you had control of a modern job and had orders to take it so far that Central Astro couldn't

give you a tape?"

Lee grinned. "That'd be O.K., too. I hate those smug characters sitting there in their ivory tower and supplying little strips of plastic to do the job that good pilots should be doing."

Shane Brent looked rueful. "Well, I guess you've licked me, Hiram. This will be the first time I've ever had to report back a

complete failure.'

"Do them good back there," Lee said, grinning. He stared curiously at Brent. "You know, Brent, you don't look like a guy who'd get much of a bang out of all this investigation junk. Why don't you take a break? I'll get you a gang of Harids. These Solaray people are O.K. to work for. Stick around. On Saturday we'll hit the Strip. There's a little gal dancing at Brownie's. A Seattle gal. Blonde. She won't even give me the right time, but you just might manage

Brent grinned. "I better think that one over Sorry to have taken so much of your

time. Lee. See you around.

Shane Brent stood at the window and watched Hiram Lee walk off in the direction of the drying sheds. Already the thick heat had put a sheen of perspiration across the broad muscular shoulders of Lee. He walked with the carefree swing of an independent man of strength and courage. Shane Brent sighed, walked out into the heat and headed for the Solaray Communications Building.

He showed his credentials to the pretty clerk and said: "I'll need a private screen and a closed circuit and the usual guarantee of secrecy. It will be a charge to Central

Assignment."

He went into the small room she had indicated, and opened the switch under the dead screen. A muted hum filled the room.

"Central Assignment," he said.

Thirty seconds later a clear feminine voice said: "Central Assignment."

"Brent calling. Give me Allison, please." Allison's face suddenly filled the screen. He was a white-haired man with a florid

face and an air of nervousness and vitality. "Hello, Shane," he said quietly. "Closed

"Of course, Frank. I've got a report on Hiram Lee.'

"Good! Let's have it. I've got the recorder

"Here goes. Memorandum to F. Allison. From Shane Brent. Subject: Personnel for Project 81-Pilot Investigation. Case of Hiram Lee, Hiram Lee has been carefully investigated and it is recommended that permission be given the undersigned to approach Lee with an offer to join Project 81. Lee is alert, capable, strong, dependable to a sufficient degree. His training is excellent. He will need little indoctrination. Quinn is to be commended for recommending him to Central Assignment. It is believed that the probable seven-year duration of the trip will not discourage Lee. It is also believed that the calculated risk of one in four of returning from the Project flight will not deter Lee. Permission is requested to contact Lee and furthermore to sound him out on becoming a colonist, dependent, of course, on his finding a suitable woman to accompany him.'

Allison, who had been listening with interest, said: "Good work! You have the

authority you request."

"Have you got a line on the executive

officer for Project 81 yet, Frank?"
Allison frowned. "Not yet, Shane. But something will turn up. Foster and Brady have filled most of the remaining slots. Denvers will go along as head physicist for the refinement of the drive brick for the return. Central Astro had given us the takeoff date as, let me see, ninety-three days from today.

"Pushing us, hey?"

"Can't be helped. It's either then or about three years from then. Say, Shane, instead of returning right away, see what you can find there in the line of an executive officer. Report if you get a line on anybody. Goodby, Shane."
"Good-by, Frank."

As the screen went blank, Shane sighed, cut the switch and walked out. At the front exit he went up the stairs to the platform, stepped into the waiting monorail suspension bus, found an empty seat. He felt drained and weary. Frank Allison was a difficult taskmaster. His personal affection for Allison made the job no easier.

At the scheduled time the bus slid smoothly away from Solaray, and braked to a stop in Allada seventy miles away in fifteen minutes. Shane Brent realized with a tight smile that it was the first time he had made any trip on Venus without paying any atten-tion to the lush bluish-black vegetation below. The vegetation had standards of vitality and growth completely different from Earth vegetation. If the port city of Allada hadn't been originally constructed on a vitrified surface, thousands of laborers would have been required to slash the tendrils which would have grown each day. In fact, when the spot for Allada had been originally vitrified, it had only been done to a two-foot depth. Tendrils broke through on the third day, heaving and cracking the surface. After that experience, spaceships had hung, tail down, over the Allada site for ten days. When the molten rock had finally cooled, the experts had estimated that the black soil was vitrified to a depth of sixty feet. No plant life had broken through since that time. The electrified cables surrounding Allada constantly spit and crackled as the searching vine tips touched them.

Shane Brent went up to his room in Hostel B, shut the door wearily, listlessly pushed the News button under the wall screen and watched the news of the day with little interest as he slowly undressed. Crowds demonstrating in Asia-Block against the new nutrition laws. Project 80, two years out said to be nearing Planet K. Skirts once again to be midway between knee and hip next season. The first bachelor parenthood case comes up to decide whether a child born of the fertilization of a laboratory ovum can legally inherit. Brent frowned. Soon a clear definition of the legal rights of "Synthetics" would have to be made. He stopped suddenly as he had an idea. He decided to submit it to Frank. Why not get inter-Federal Aid for a project to develop Synthetics to fill personnel requirements for future project flights? But would humanity agree to colonization by Synthetics? It still wasn't clearly understood whether or not they'd breed true.

He turned off the news, took a slow shower and dressed in fresh clothes. It was a nuisance changing the insignia. He wadded up the clothes he had removed and shoved

them into the disposal chute.

At five o'clock he got on the call screen and got hold of the general manager at Allada. The man recognised him immediately. "What can I do for you, Brent?"

As soon as Hiram Lee gets off duty, send

him in to see me at Hostel B."

'I hope you don't steal him away from us, Brent. He's the best man we've got with the Harids. He doesn't scare easy.

Brent grinned, "I'll try to scare him away

from me, sir.

He walked away from the screen, went



into the shower room and examined the drinkmaster. It was one of the old type. No choice of brands. He set the master dial to one ounce. He pushed the gin button three times, the dry vermouth button once. He turned the stir lever and held it on for a few seconds before he turned it off. He looked in the side compartment and found no lemon, no olives, no pickled onions. That was the trouble with Central Assignment only approving the second-class places. He took the right size glass off the rack, put it under the spout and lifted it until the rim tripped the lever. The Martini poured smoothly into the glass, beading the outside of it with moisture. Down in the lobby the centralized accounting circuit buzzed and the price of the Martini was neatly stamped on his bill.

He walked back into the other room, sat in the deep chair and sipped the Martini, thinking it odd that with all the scientific experimentation in taste effects, no one had yet come up with any substitute for the delicacy and aroma of a dry Martini.

Hiram Lee arrived as he was sipping his

third.

Twenty minutes later Hiram Lee stood at the windows, his lips compressed, pounding his fist into his palm in monotonous rhythm.

He turned suddenly. "I don't know what I'm waiting for, Shane. Yes! Count me in. When do we leave?"

"Hold up there, boy. You've got to go to school for a while. And how about the colonization angle. Will you want to stay?"

Lee grinned. "If I could talk that little Seattle blonde into going along, three years would be a short, short trip."

"Providing she could pass."

"Oh, sure. I think she'd pass. But she's too smart to tie up with me. Maybe. At least I'll give it a try. When have I got to tell you about whether or not I want to stay on this brand new world you boys have located?"

"Let me see. Ninety-three days from now is takeoff. Thirty days would be needed to approve and train a woman. You have sixty-three days to convince this blonde of yours that you're a very attractive guy. And then you'll have to talk her into taking a little three-year trip and settling down in the brush with you."

Lee looked at him curiously. "You knew all this early this afternoon and you gave me that song and dance with a straight

"That's my profession, Hiram."

"You're good at it, but I still have got

an urge to bust you one."

"We'll arrange that some time. Rightnow I'm looking for recommendations for somebody to fill the slot of executive officer aboard the Project flight. Any ideas?"

Lee frowned. "None of those boys at Solaray will do. I can tell you that quick. They're either slowly congealing in their

own juice or they're making too good a thing out of their job. Better hunt around in the other plantations. There's a guy named Mosey over at Factri-grown on the other side of Allada that has a good reputation."

"I'll take a look. And by the way, Hiram.

All this is under the hat.'

"Natürlich, mein herr. May I respectfully recommend that we embark on an evening of wine and song? I hold out little hope for the other ingredient."

One big meal and two hours later, Shane Brent and Hiram Lee walked into the club on the strip—the club called Brownie's.

The air was chilled, thinned and scented with the crispness of pine. The place was lighted by glowing amber disks set into the walls. It was packed with the usual type of crowd. Bug-eyed tourists trying to pretend that it was old stuff to them; hard-drinking, hard-fisted men from the plantations; neat, careful kids from the ship crews in Allada port; the odd-job drifters who had become parasites on the social structure of Allada; a big party of Allada politicos, wining and dining two inspectors from Asia-block.

By luck they found an empty table for two not far from the dance floor. Hiram Lee was on hard liquor and Brent, feeling his limit near, had shifted to beer.

Lee said, slurring his words: "You're smart to get over onto beer, friend. You got to drink in this climate quite a while before you pick up a good head for the stuff." He glanced at his watch. "Floor show in ten minutes. Then you can see my blondie."

Shane Brent felt the artificial gayety draining out of him. He looked around at the other tables, seeing suddenly the facial lines of viciousness and stupidity and greed. He remembered his reading of history and guessed that there must have been faces just like these in the early days of the American West. California in 1849 and 1850. Easy money attracted those who had been unable to make a proper adjustment to their accustomed environment. Actually it was the result of exploitation. The Harids, with their ant culture, had put up suicidal defense until General Brayton had discovered the wave length of the beamed thought waves which directed the Harids of each colony. Science had devised stronger devices than the colony waves and suddenly the Harids were servants.

Each foreman, such as Hiram Lee, carried one of the wave boxes and directed his crew. Central Economics had proven that the use of Harids in the culture—picking and drying of the herbs—was cheaper than any mechanical devices which could be

Several couples danced to the music which came directly from New York. The over-

size screen, a special three-dimensional job with good color values; covered most of the wall beyond the dance floor, showed a full orchestra. Brent guessed that when the floor show came on the management would either use live music or cut off the New York program and feed recordings onto the screen.

The second guess proved right. The screen darkened and the couples left the floor. It brightened again, showing a canned vision of a small group completely equipped with electrical instruments. The M.C. walked out as the spot came on. He carried a small hand mike. After the initial fanfare, the music gave him a soft background and he 'This show costs a lot of money to put on. All you folks drinking beer kindly turn your chairs around with your backs toward the floor. It is my pleasure to present a young lady who doesn't belong out here on Venus, wasting her time and talents on you space-burnt wanderers On the other hand, Venus is a very appropriate spot for her to be. I give you Caren Ames and her famous Dance of a New World!" grinned and backed out of the spot which widened until it covered most of the small dance floor.

The music shifted into a low, throbbing beat, an insistent jungle rhythm. Brent smiled cynically at the build-up, thought it was pretty fancy for what would probably

turn out to be an aging stripper.

She backed slowly onto the floor, staring into the shadows from which she backed. Brent's breath caught in his throat. She was a faintly angular girl who should have had no grace. She wore a stylized version of the jungle clothes of the foremen on the plantations. Across her shoulder was slung a glittering replica of one of the thought boxes. She carried in her right hand a shining knife of silver.

She moved with such an intense representation of great fear that Brent felt the uneasy shifting of the crowd. The music was a frightened heartbeat. Her grace was angular, perfect and beautiful. Her face was a rigid mask of fear, her blonde hair a frozen gout of gold that fell across one

. shoulder.

The throng gasped as the thing followed her into the middle of the floor, stood weaving, with its eyes on her. At first glance Brent thought that it was actually one of the Harids, but then he realized that it was a clever costume, worn by a rather small person. It had all the swaying obscenity of one of the tiny praying mantis of Earth. The swollen abdomen, the little triangular head, the knotted forearms held high-all of it covered with the fine soft gray scales of a Harid. The three digits of each hand waved aimlessly about like the antennae of a mammoth insect.

The expanding spot showed a small bush

covered with the blue-black oily foliage of Venus. The girl stood her ground, lifted the thought box to her lips. She swayed slightly in rhythm with the Harid and her shoulders straightened as the Harid turned away from her, went over toward the bush. It began to pluck at the leaves with the perky, incredibly fast motions of the genuine Harid. Her dance of fear turned slowly into a dance of joy of release from fear. The tempo of the music increased and she danced ever closer to the squat form of the Harid, the knife in her hand cutting joyous sparkling arcs in the flood of tinted light.

She danced ever faster, and Brent said to Lee out of the corner of his mouth: " is she doing here? She's wonderful!"

'I told you she was, boy.'

A movement to Brent's right caught his eye. A bulky man from one of the plantations, very drunk, wavered on his chair as he watched the dance with slitted eyes. The lines around his mouth were taut. Brent felt wonder that the girl's artistry could have such an effect on one of the hardened foremen.

The music increased to a crescendo, and suddenly stopped. The girl stood motionwidespread. her arms slow beat began. The Harid to sway its head slowly from side to side in time with the beat. A woman in the darkness screamed softly. Head swaying, the Harid turned slowly and faced the girl. Her face once again became a face of fear. The knotted arms of the thing lifted high. The girl took a slow step backward. The tension was a physical thing-it could be felt in the utter silence of the audience.

At that moment the man whom Brent had noticed earlier roared, and jumped to his feet. There was a knife in his hand. He started for the mock Harid. Shane Brent left his chair in a quick smooth motion. His shoulder slammed against the thick thigh of the man with the knife and the two of them fell and slid across the polished floor. The room was in an uproar. The foreman bounded up, his drunken face twisted with rage. He drew the knife hand back to slash at Brent. Brent fell inside the thrust and struck the man a hammer blow across the side of his throat with the edge of his palm. The lights came on as the man dropped heavily onto his face. No one had thought of the music. It continued on. The mock Harid stood up and turned into a pale slight man who held the head portion of his costume in his hand. His pale lips trembled. He said, with great wonder: That fellow would have cut my head off!"

The M.C. came out and said to the girl: "Want to try again from scratch, Miss Ames?"

Her eyes were still wide with shock. "No . I couldn't. Not right now. The next show maybe.'

The M.C. turned to Brent. "Your check will be on the house, of course. The management is grateful.

The pale young man said: "I'm a little more grateful than the management.

"Thank you," Caren said simply.
Brent grinned at her. "You can return the favor by coming to our table after you change, Miss Ames. We're right over there."

She looked uncertain for a moment. "I

don't usually-

"Just this time, Miss Ames," the M.C.

Her smile was brilliant as she turned and left the floor. "See you in a few minutes, Mr.-

"Brent. Shane Brent."

By that time the foreman was back on his feet, pale and shaking. He didn't understand what had happened. His friends led him back through the tables and out the door. He was protesting plaintively.

She sat quietly at the table between them and talked generalities in a quiet, cultured voice. Her between-acts dress was dark and conservative, her blonde hair pulled back

with determined severity.

She rebuffed the clumsy verbal advances of Hiram Lee very politely. By the time Shane Brent sat through the next show, enthralled anew by her artistry, Hiram Lee had his head on the table and was snoring softly.

During the dull act which followed Caren's, two heavily built men came over to the table and shook their heads sadly. "Poor ole Hiram! Tch! Tch! You mind, mister, if we lug ole Hiram back with us to Solaray. The poor boy needs a nice soft

Hiram protested feebly, but walked unsteadily between them, half supported by them as he left. Caren came back a few

moments later.

They sat and talked of many things. At last she smiled and said: "I was silly when I was afraid to sit with you. Usually such things become a bit . . . messy."

He grinned. "I'm harmless. It does seem

a little funny to me to find somebody like

you in . . . this place."
Her eyes hardened. "I know how it goes from here on. Caren, you're too nice for a place like this. Let me take you away with

me. I know the whole routine, Mr. Brent."
"It's not like that, Caren. Honestly. If
I've asked a clumsy question, I'm sorry. It

wasn't a buildup.

She looked into his eyes for long seconds. "All right, Shane. I believe you. I'll tell you how it happened. I was trained for ballet. When I was nineteen I married a very rich and very weak young man. After two years life became impossible. I managed to get a divorce. Every minute I spend on Earth is spent keeping out of his way. He manages to queer me in every dancing job I get. He has a weak heart. They won't accept him for space travel. I'm safe here. I can keep this job. But I can't ever go

She didn't ask for pity as she told him. It was as though she spoke of someone

"What kind of a career can you have

here, Caren?"

She smiled and for once it wasn't a pretty smile. "I can make a living here. Some day there will be other cities beside Allada. Some day there will be a civilization on Venus which will be cultured enough so that my kind of career can exist here. But I won't live to see it."

"What do you want out of your life?"

he asked gently.

"Peace. Freedom to do as I please." Her eyes were troubled.

"Is that all?" he asked insistently.

"No!" she flared. "I want more than that, but I don't know what I want. I'm just restless." She stopped and looked at him for long moments. "You are too, Shane. Aren't you?"

He tried to pass it off lightly. "Things have been a little dull lately."

Take me for a walk through the city. Shane. When I feel like this I have to walk it off."

They walked to the edge of the wire near the constant sparking and crackling as the electricity crisped the searching tendrils. Above them the strange stars shone dimly

through the constant heavy mist. She stood with her head tilted back, her eyes half shut. On an impulse he reached out and unclasped the heavy pin that bound her hair so tightly. It fell in a shining flood over her shoulders.

Why-" she said, startled.

"It just had to be. I feel like we've both been caught up in something outside of us and we're being hurtled along. Everything from here on will be because it has to be."

Without another word she came quickly into his arms. She was as intensely alive as during the intricate figures of her strange

dance.

Once again the pretty clerk pointed out the small room to Shane Brent. He walked slowly, reluctantly, shut the door quietly behind him. In a short time he had a closed circuit to Central Assignment and moments later the alert face of Frank Allison filled the screen.

"What's the matter, Shane? You look done in. Rough night?"

"You could call it that I guess."

"How about Lee?"

"Everything is set, Frank. He'll leave on Flight Seven a week from today. Have

[Continued on page 64

INHERITANCE

By ARTHUR C. CLARKE

He had a strange protection against death; he knew how he was going to die, and hence had no fear of anything till that came up. But it happened somewhat otherwise . . .

As David said, when one falls on Africa from a height of two hundred and fifty kilometers, a broken ankle may be an anticlimax but is none the less uncomfortable for that. But what hurt him most, he pretended, was the way we had all rushed out into the desert to see what had happened to the A20 and hadn't come near him until hours later.

"Be logical, David," Jimmy Langford had protested. "We knew that you were O.K. because the base 'copter radioed when you were picked up. But for all that we knew, the A20 might have been a complete write-off."

"There's only one A20," I said, trying to be helpful, "but rocket test pilots are.... well, almost plentiful.'

David glared back at us from beneath his bushy eyebrows and said something in

"The Druid's curse," Jimmy remarked to me. "Any moment now you'll turn into a leek or a scale model of Stonehenge."

You see, we were still pretty lightheaded and it wouldn't do to be serious for a while. Even David's iron nerve must have taken a terrific beating, yet somehow he seemed the calmest of us all. I couldn't understand

The A20 had come down fifty kilometers from her launching point. We'd followed her by radar for the whole trajectory, so we knew her position to within a few meters—though we didn't know at the time that David had landed ten kilometers further east.

The first warning of disaster had come seventy seconds after takeoff. The A20 had reached fifty kilometers and was following the correct trajectory to within a few per cent. As far as the eye could tell, the luminous track on the radar screen had scarcely deviated from the pre-computed path. David was doing two kilometers a second not much, but the fastest any man had ever traveled up to that time. And Goliath was just about to be jettisoned.

The A20 was a two-step rocket. It had to be, for it was using chemical fuels. The upper component, with its tiny cabin, its folded airfoils and flaps, weighed just under twenty tons when fully fueled. It was to be lifted by a lower two-hundred-ton booster which would take it up to fifty kilometers, after which it could carry on quite happily

under its own power. The big fellow would then drop back to Earth by parachute. It wouldn't weigh much when its fuel was burnt. Meanwhile, the upper step would have built up enough speed to reach the six hundred kilometer level before falling back and going into a glide that would take David halfway round the world if he wished.

I don't remember who called the two rockets David and Goliath, but the names caught on at once. Having two Davids around caused a lot of confusion, not all

of it accidental.

Well, that was the theory, but as we watched the tiny green spot on the radar screen fall away from its calculated course, we knew that something had gone wrong. And we guessed what it was.

At fifty kilometers the spot should have divided in two. The brighter echo should have continued to rise as a free projectile, and then fallen back to Earth. But the other should have gone on, still accelerating, drawing swiftly away from the discarded booster.

Instead, there had been no separation. The empty Goliath had refused to come free and was dragging David back to Earth—helplessly, for David's motors could not be used. Their exhausts were blocked by the machine beneath.

We saw all this in about ten seconds. We waited just long enough to calculate the new trajectory, and then we climbed into the copters and set off for the target area.

All we expected to find, of course, was a heap of magnesium looking as if a bulldozer had gone over it. We knew that Goliath couldn't eject his parachute while David was sitting on top of him, any more than David could use his motors while Goliath was clinging beneath. I remember wondering who was going to break the news to Mavis, and then realizing that she'd be listening to the radio anyway and would know all about it as soon as anyone.

We could scarcely believe our eyes when we found the two rockets coupled together, lying undamaged beneath the big parachute. There was no sign of David, but a few minutes later Base called to say that he'd been found. The plotters at Number Two Station had picked up the tiny echo from his parachute and sent a 'copter to collect him. He was in hospital twenty minutes later, but

we stayed out in the desert for several hours checking over the machines and making

arrangements to retrieve them.

When at last we got back to Base, we were pleased to see our best-hated science reporters among the mob being held at bay. We waved aside their protests and sailed on into the ward.

The shock and the subsequent relief had left us all feeling rather irresponsible and perhaps childish. Only David seemed unaffected—the fact that he'd just had one of the most miraculous escapes in human history hadn't made him turn a hair. He sat there in bed pretending to be annoyed at our

jibes until we'd calmed down.

"Well," wrong?" said Jimmy at last, "what went

"That's for you to discover," said David. "Goliath went like a dream until fuel-cutoff. point. I waited then for the five-second pause before the explosive bolts detonated and the springs threw him clear, but nothing hap-pened. So I punched the emergency release. The lights dimmed, but the kick I'd expected never came. I tried a couple more times, but somehow I knew it was useless. I guessed that something had shorted in the detonator circuit and was earthing the power supply.

"Well, I did some rather rapid calculations from the flight charts and Abacs in the cabin. At my present speed I'd continue to rise for another two hundred kilometers and would reach the peak of my trajectory in about three minutes. Then I'd start the two hundred and fifty kilometer fall and should make a nice hole in Africa four minutes later. All told, I seemed to have a good seven minutes of life left-ignoring air-resistance, to use your favorite phrase. That might add a couple of minutes to my expectation of

"I knew that I couldn't get the big parachute out, and David's wings would be useless with the forty-ton mass of Goliath on his tail. I'd used up two of my seven minutes

before I decided what to do.

"It's a good thing I made you widen that air lock. Even so, it was a squeeze to get through it in my spacesuit. I tied the end of the safety rope to a locking lever on the door and crawled along the hull until I reached the junction of the two steps.

"The parachute compartment couldn't be opened from the outside, but I'd taken the emergency ax from the pilot's cabin. It didn't take long to get through the magnesium skin; once it had been punctured I could almost tear it apart with my hands. A few seconds later I'd released the 'chute. The silk floated aimlessly around me: I'd half expected some trace of air resistance at this speed, but there wasn't a sign of it. I could only hope that when we re-entered atmosphere it would spread itself without fouling the rocket.

"I thought I had a fairly good chance of getting away with it. The additional weight

of David would increase the loading of the parachute by less than twenty per cent, but there was always the chance that the shrouds would chafe against the broken metal and be worn through before I could reach Earth. In addition the canopy would be distorted when it did open, owing to the unequal length of the cords. There was nothing I could do about that.

"When I'd finished, I looked about me for the first time. I couldn't see very well, for perspiration had misted over the glass of my suit. Someone had better look into that-it can be dangerous. I was still rising, though very slowly now. To the northeast I could see the whole of Sicily and some of the Italian mainland; further south I could follow the Libyan coast as far as Benghazi. Spread out beneath me was all the land over which Alexander and Montgomery and Rommel had fought when I was a boy. It seemed rather surprising that anyone had ever made such a fuss about it.

"I didn't stay outside long; in three minutes I'd be entering the atmosphere. I took a last look at the flaccid parachute, straightened some of the shrouds, and climbed back into the cabin. Then jettisoned David's fuel-first the oxygen, and then, as soon as it had time to disperse, the

alcohol.

'That three minutes seemed an awful long time. I was just over twenty-five kilometers high when I heard the first sound. It was a very high-pitched whistle, so faint that I could scarcely hear it, but it built up quickly to a thin, continuous scream that set my teeth on edge. Glancing through the portholes I saw that the parachute shrouds were becoming taut and that the canopy was beginning to billow above me. At the same time I felt weight returning as the rocket began to decelerate.

The calculation wasn't very encouraging. I'd fallen free for over two hundred kilometers and if I was to stop in time I'd need an average deceleration of ten gravities. The peaks might be twice that, but I'd stood fifteen G before now in a lesser cause. So I gave myself a double shot of dynocaine and uncaged the gimbals of my seat. I remember wondering whether I should let out David's little wings, and decided that it wouldn't

help. Then I must have blacked out.
"When I came round again I had normal weight. I felt very stiff and sore, and to make matters worse the cabin was oscillating violently. I struggled to the port and saw that the desert was uncomfortably close. The big parachute had done its work, but I thought that the impact was going to be rather too violent for comfort. So I jumped.

'From what you tell me I'd have done better to have stayed in the ship. But I don't

suppose I can grumble."

We sat in silence for a while. Then Jimmy remarked casually:

"The accelerometer shows that you touched twenty-one gravities on the way down-only for three seconds though. Most of the time it was between twelve and fifteen."

David didn't seem to hear and presently

I said:

"Well, we can't hold the reporters off much longer. Do you feel like seeing them?'

David hesitated.

"No," he answered, "not now."
He read our faces and shook his head

"No," he said with emphasis, "it's not that at all. I'd be willing to take off again right now. But I want to sit and think things over for a while."

His voice sank and when he spoke again it was to show the real David behind the

perpetual mask of extraversion.

"You think I haven't any nerves," he said, "and that I take risks without bothering about the consequences. Well, that isn't quite true and I'd like you to know why. I've never told anyone this, not even Mavis.

"You know I'm not superstitious," began, a little apologetically, "but most materialists have some secret reservations,

even if they won't admit them.

"Many years ago I had a peculiarly vivid dream. By itself, it wouldn't have meant much, but later I discovered that two other men had put almost identical experiences on record. One you've probably read, for the man was J. W. Dunne.

"In his famous book, 'An Experiment Time,' Dunne tells how he once dreamed that he was sitting at the controls of a curious flying machine with swept-back wings, and years later the whole experience came true when he was testing his inherent stability airplane. Remembering my own dream, which I'd had before reading Dunne's book, this made a considerable impression on me. But the second incident I found even more striking.

"You know Igor Sigorsky; he designed the first transatlantic Clippers and made the modern helicopter possible. In his auto-biography, 'The Story of the Flying S,' he tells us how he had a dream very similar to

Dunne's.

"He was walking along a corridor with doors opening on either side and electric lights glowing overhead. There was a slight vibration beneath his feet and somehow he knew that he was in a flying machine. Yet at that time there were no airplanes in the world and few people believed there ever would be.

Sigorsky's dream, like Dunne's, came true many years later. He was on the maiden flight of his first Clipper when he found himself walking along corridor." that familiar

David laughed, a little self-consciously.

"You've probably guessed what my dream as about," he continued. "Remember, it was about,"

would have made no permanent impression if I hadn't come across these parallel cases.

"I was in a small bare room with no windows. There were two other men with me, and we were all wearing what I thought at the time were diving suits—though I know better now. I had a curious control panel in front of me, with a circular screen, built into it. There was a picture on the screen, but it didn't mean anything to me and I can't recall it now, though I've tried many times since. All I remember is turning to the other two men and saying: 'Five minutes to go, boys'-though I'm not sure if those were the exact words. And then, of course, I woke up.

That dream has haunted me ever since I became a test-pilot. No—haunted isn't the right word. It's given me confidence that in the long run everything would be all rightat least until I'm in that cabin with those two other men. What happens after that I don't know. But now you understand why I felt quite safe when I brought down the A20 and when I crash-landed the A15 off

Pantelleria.

'So now you know. You can laugh if you please-I sometimes do myself. But even if there's nothing in it, that dream's given my subconscious a boost that's been pretty useful.'

We didn't laugh, and presently Jimmy

said with careful unconcern:

"Those other men—did you recognize them?

David looked doubtful.

"I've never made up my mind," he answered. "Remember, they were wearing spacesuits and I didn't see their faces clearly. But one of them looked a lot like you, though he seemed a good deal older than you are now. I'm afraid you weren't there, Charlie. Sorry. I don't know who the second

"That suits me," I said, very nearly meaning it. "As I've told you before, I'll have to stay behind to explain what went wrong. I'm quite content to wait until the passenger

service starts."

Jimmy rose to his feet.
"O.K., David," he said. "I'll deal with the gang outside. Get some sleep now-with or without dreams. And by the way, the A20 will be ready again in a few weeks. I think she'll be the last of the chemical rockets; they say the atomic drive's nearly ready for us.

We never spoke of David's dream again, but I think it was often in our minds. Three months later he took the A20 up to six hundred and eight kilometers-a record which will never be broken by a machine of this type, because no one will ever build a chemical rocket again. David's uneventful landing in the Nile Valley marked the end of the epoch which had begun in Germany in the 1920s.

It was three years before the A21 was ready. She looked very small compared with her giant predecessors, and it was hard to believe that she was the nearest thing to a true spaceship that man had yet built. This time the takeoff was from sea level, and the Atlas Mountains, which had witnessed the start of our earlier shots, were now merely the distant background to the scene.

We walked with David out to the launching site, talking in the inconsequential way one does on such occasions. He was as confident as ever, and we, too, had begun to share his belief in his own destiny. I remember asking him if he'd told Mavis about his dream, for I'd often thought that hers was the hardest part of all. She could do with some of his assurance during the long hours of waiting. He hesitated for a moment before he answered.

"No," he said, "I've not told her. She's very—practical—you know. Besides, young Dave keeps her from worrying about me."

"He's nearly fifteen now, isn't he?" I asked. "Is he going to follow in his father's

footsteps?"

"No fear," said David firmly. "He's not old enough to know his own mind yet, but I hope he'll take up architecture, so that there'll be someone to carry on the family business now that I've let them down so badly."

We paused for a moment in the air lock while the cameras watched us with hungry eyes. Then Jimmy said softly, so that no one could overhear:

"It won't be long now, David, before we

build that three-man ship of yours."

And I knew that he was only half joking. We watched through tinted glasses as the A21 tore up into the sky, trailing behind her the terrible beauty of the atomic blast. Within a minute the machine was lost from sight and we raced to the plotting room so that we could still follow her on the way to space.

When we got there the signal was just fading from the radar screens, and the detonation reached us a little later. It was a very small explosion, for if the machine had been much higher there would have been no sound at all. And that was the end of David and his dreams.

The next I recall of that period is flying down the Conway Valley in Jimmy's 'copter, with Snowdon gleaming far away on our right. We had never been to David's home before and we were not looking forward to this visit. But it was the least that we could do.

As the mountains drifted beneath us we talked about the suddenly darkened future and wondered what the next step would be. Apart from the shock of personal loss, we were beginning to realize how much of David's confidence we had come to share ourselves. That confidence, and much else, had been utterly destroyed.

We wondered what Mavis would do, and discussed the boy's future. I had not seen him for several years, and Jimmy had never

met him at all.

Mavis was quite calm and collected, though she seemed much older than when I had last met her. For a while we talked about business matters and the disposal of David's estate. I'd never been an executor before, but tried to pretend that I knew all about it.

We had started to discuss the boy when we heard the front door open and he came into the house. Mavis called to him and his footsteps came slowly along the passage. We could tell that he didn't want to meet us, and his eyes were still red when he entered the room.

I had forgotten how much like his father he was, and I heard a little gasp from Jimmy.

"Hello, David," I said. "I expect you remember me. This is Jimmy Langford."

David never looked at me. He stood quite still, staring at Jimmy with that puzzled expression of a man who has seen someone before but can't remember where.

And in that moment I knew, with a certainty beyond all proof and all reason, that young David was never going to be an

architect.



DAWN OF NOTHING

By A. BERTRAM CHANDLER

The Great God ARP was a little understood deity. But it was a time of little understanding, save in one house where the old was studied.

PERHAPS it was the wind that deflected the arrow ever so slightly. Perhaps it was that old Maluph, Master Fletcher to the People of Bart, had let his craftsman's hand shake a little in the fashioning of this one shaft. Perhaps it was that Enery, Bart's chief huntsman, had taken aim and let fly too

hastily.

But Enery himself had another explanation. He was to blame—but his culpability was more than a mere matter of aim too quickly and carelessly taken, of bow insufficiently bent. He was to blame because, last night, he had deliberately neglected the worship of ARP, And ARP the Watchful, ARP the All-Seeing, had overlooked neither the slight nor the quarrel between Enery and Pardi, Hereditary Warden of the God, that had preceded it. He had watched, with divine disapproval, the deliberate abstention from the propitiatory rites of the Shielded Light, the Extinguished Fire. And so ARP, Guider of the Missile, had signified his extreme displeasure by withdrawing his benign influence from the feathered shafts in Enery's quiver.

The stag, a short length of arrow protruding from its flank, sprang high into the air. The hunter hastily snatched another arrow from his quiver, fitted notch to bowstring, drew back swiftly to his right ear. But he was too late. Scarcely had the animal's feet touched earth before it had bolted into the forest. The sound of its passage through the undergrowth diminished, faded fast, as trees and shrubs and bushes were interposed between the hunter and his

quarry.

Enery returned the arrow to his quiver, slung the long six-foot bow over his shoulder. His right hand went down to the knife in the sheath at his right side. His thigh muscles tensed as he fell into the runner's crouch, started to follow the stag.

Then he remembered.

"Great ARP, your pardon," he muttered. And, standing alone in the sunlit field at the forest's verge, he went through the daylight ritual. Through ringed thumbs and fore-fingers he stared solemnly at the cloudless

sky. Still looking up, he brought his hands down from his face, clapped them sharply five times. And, his face passive, he thought: But why, oh ARP, must your wardens always be such fools? Take to yourself men and we will respect them and respect you all the more.

He was careful to keep his bearded lips motionless. ARP sees all, hears all, but the thoughts of men are a mystery to him. Thus it was that the Ancients fell.

Enery, having slipped with practised ease through the brief rites, took up the chase. The trail was easy to follow. The stag had been bleeding copiously. ARP or no ARP the arrow could not have been badly aimed. The hunter found himself regretting the time that he had wasted at the forest edge. As he ran he remembered his bitter argument with Pardi, the warden—the quarrel during which he had asserted that ARP was a fit God for women and children and fat, priestly men, but no deity for the warrior or the hunter. He would never have gone so far had he not been sure that the grizzled Bart secretly agreed with him. Bart, as Chief, would find it impolitic challenge the theocratic power so intimately bound up with his own, lest, by so doing, he weaken his own authority. He had no objections should others do so. He had even been known to protect heretics from the wrath of the followers of ARPhis protection consisting of a plea for tolerance, the invocation of the vague, yet universally respected principle known as the Magnic Charter. And if the heretic had been, like Enery, a strong man armed, his heresy had gone unpunished.

It was a pity that most of such heretics had been married men whose wives had bleated tearfully for a return to the flock

f Pardi

A briar tendril curled around the hunter's ankle, brought him crashing heavily down. Luckily for him the bushes broke his fall. He scrambled to his feet, bleeding from a score of scratches—his scanty summer garment of light skins was not much protection—carefully disentangled the string of

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his bow from the sharp thorns. He was almost decided to leave it there—here, with the trees close together and but a narrow passage through the bushes left by the wounded stag, it was a serious encumbrance. But he did not want to lose it. There were things in the woods—some said it was the wild dogs, but why should they do anything so pointless?—that carried off for their own purposes any man-fashioned stick.

So he pushed on, hampered by the long bow, alert for the frequent bright splashes on leaf and mossy ground. The trail was growing old. Already great fat-bodied flies were feasting on the spilled blood, rising with resentful buzz at his approach, falling back again to their meal after his passing. But he dare not hurry. Even should he keep his rebellious mind from straying from the business on hand, he dare not hurry. A broken leg, a seriously twisted ankle, could well mean his death. By day there were the packs of dogs—although they, as a rule, preferred more open country. And both by day and night there were the tree cats. If he failed to return from this expedition, then Pardi, surely, would attribute his disappearance to the wrath of ARP.

Come orf it! he thought in the vernacular of his people. Even if the warden is sweet on young Lisa there ain't no need ter think abaht it orl the time, ter let it put yer orf yer stroke. The main thing is ter get that ruddy stag afore them ruddy cats gets 'im first!

Doggedly, he pushed on. The trail became fresher again. There were gouts of blood that had not been found by the carrion flies. There were bruised and broken stems with the sap still oozing from the fractured ends. And there was, faint but growing louder, the sound of a heavy body forcing its way through the forest.

And this sound suddenly ceased.

Enery drew his knife. He pushed on boldly, perhaps a little carelessly. He noticed that the undergrowth was thinning, that the trees were now sparsely spaced and somehow sickly. But he failed to draw the obvious conclusion.

The dwelling of the Ancients that had once stood there had long vanished. Perhaps the failure of ARP's protection had let it be swept away like a dead leaf before a gale. Perhaps the infinitely slow, infinitely ruthless strength of growing things had leveled its walls over the course of centuries. But although the building itself was gone, the artificial caverns beneath it remained. And into these, following his quarry, fell the hunter.

It was dark when he recovered consciousness. In his nostrils was the scent of death, of once hot blood gone cold and stale. Beneath him was something soft yet firm, the carcase of the stag. His exploratory hand touched the antiered head. He was briefly thankful that he had not fallen on to those branching, dangerous weapons.

Right above him was a patch of pale light. Silhouetted against it were the leafy branches of trees, among which glimmered a few dim stars. And there was something scrambling in the aperture, something that

uttered a low mewling sound.

The hunter fumbled in his pouch. He pulled out his flint and steel. He smote the crude wheel with the palm of his hand. In the light of the sparks the green eyes of the big cat in the opening glowed balefully. Enery could see no more than a dim outline—but he sensed that it was tensed for

a spring.

But the tow caught. It smoldered at first and then, after more than a little blowing on the part of the firemaker, burst into flickering flame. The hunter thrust up his crude, feeble torch. He was just in time. The big cat snarled, showing its sharp white teeth. It slashed out and down with a razor-clawed fore paw. It hit the torch, sent scattering a shower of sparks, but did not extinguish the flame. It snarled again—and there was something of a scream in the ugly sound. There was a frantic scrabbling of the three uninjured paws as it backed away from the hole. And only a stink of burned fur remained.

"May ARP let you be smitten, you mucking, dirty swine!" shouted Enery. He jumped down from the carcass of the stag, landed, with a loud crackling, in a pile of dry debris. He tried to drag the stag away from under the opening, but it was too heavy. It was a pity. It meant that much good meat would be spoiled.

Working fast—for he heard the cats prowling and crying to each other overhead—he piled the debris high on the body of the animal. He smote his wheel again with the palm of his hand. This time the tow caught fast and easily. He blew upon the glowing smolder until he had a flame. This he applied to the bonfire that he had built on top of the dead stag. It roared and crackled into flaming life. The smoke and flames rushed up through the opening. A draft of colder air came in from somewhere, replacing that lost by convection. There was no danger of suffocation—and the night-prowling cats would never dare a leap down through the blaze.

Enery grinned. He was safe for the night. The smell of roasting venison was savory in his nostrils—he hoped that it would be equally savory in the nostrils of his enemies. He drew his knife and hacked for himself a large steak, impaled it on a

long, pointed stick. He sat down, the meat extended to the fire on the improvised fork, and waited for his supper to cook.

It was not until he was eating it, some minutes later, that the stench of burning meat drove him away from the fire, prodded him into an investigation of the place into which he had fallen.

It must have been used as a storeroom of some kind. There were boxes—or what was left of them—all packed with sheet after sheet of flimsy fabric. Unlike some of the material left—and found now and again by lucky discoverers—by the Ancients, it was useless for clothing or any kindred purpose. It was dry and brittle and tore easily. It had been disturbed by rats and other small beasts who had shredded it and carried it away to their nests. And in one or two of the boxes the rats themselves had nested. But it burned. Useless it was for anything but that. It burned well.

Enery was disappointed. He had known others who had made similar finds, who had stumbled upon storehouses of all kinds of useful tools and weapons. He stood there in the light of his flaring fire, tearing with his teeth at the hunk of meat held in his right hand, holding a sheet of the useless fabric in his left. He looked at it contemptuously. Its yellowed surface was marred with little black marks. It was neither useful nor ornamental. He screwed it into a tight ball and cast it on to the fire.

But there must, he told himself, be something of value stored here. He lifted one of the boxes, intending to tip it over and spill its contents on the floor. But the sides burst as he was starting to do so. And in the box were still more of the sheets of fabric—but these were themselves boxed in a binding of some stiffer material. He opened them, looked through them with intolerant ignorance. There was one that appealed to him. It had pictures in addition to the meaningless little black marks—pictures such as William, the artist, could never hope to equal. There were men there, strangely clad and bearded. And there were women, attired as strangely as the men or naked, and with a slender grace that had passed from the world with the passing of the Ancients. The little black marks may have been meaningless to the hunter, but the pictures stirred something deep and lost in his nature, were magic casements opening wide on fairy lands far beyond his limited ken.

Hastily, almost surreptitiously, he stuffed the little box into the pouch at his belt.

There were other little boxes with pictures in them. But these were ugly, meaningless. They were no more than lines and circles—and the clearest of them seemed to be depictions of fantastic and graceless constructions. But they might, Enery decided, have some

value or interest. He would take them to Bart. Even though the stag was lost—or most of it—he would not return entirely empty handed.

He slept a little then, stretched out on a bed made of the pieces of flimsy fabric piled high in a rectangular pile. It was not too uncomfortable. And it was almost his last sleep. He was awakened by a spasm of violent coughing. His smarting, smoke-filled eyes opened on what, at first, seemed to be the Hell promised for all those who did not follow ARP. The cavern was filled with a ruddy glare, with scorching heat. The flames had spread from the fire to the dry debris with which the floor was littered.

Enery staggered to his feet. He forgot the little boxes of fabric that he had intended to take out with him, that lay beside his bed, soon to be consumed by the hungry flames. He remembered his bow that, as always, had been beside him as he slept. He snatched it up. And, more by instinct than by conscious volition, he turned his face to the indraught of cold air, started to stumble in the direction from which it was coming.



The heat of the fire was fierce on his back when he found the door. It was of thick timber, bound with metal. Long ago, when the Ancients had made it, it had been strong. Now it was rotten, yielded at the first, preliminary nudge of the hunter's shoulder. And Enery fell out onto the dew-wet grass, used his last reserves of energy to crawl away from the tongues of fire that licked out after him.

And it was daylight, and the danger from the cats—although still to be reckoned with —was greatly lessened.

After a short rest the hunter began his trudge back to the village of Bart.

"And wot's this I 'ear?" demanded the chief. "My best 'unter back from the chase wiv nuffin'? I tell yer, Enery, it won't do!" Enery looked back at his master. He

Enery looked back at his master. He looked at the little eyes, half hidden by the grizzled tangle of hair and beard. He thought that he detected a twinkle, belying the severity of the chief's tone.

"Sorry, guv'ner," he said. "I got a stag—a big 'un—but 'e fell into one o' them old caves wot the Old 'Uns used ter make. Aht in the woods, it was. I'd chased 'im for miles, too, follered 'is trail, like. 'E was bleedin' 'eavy, see? An' I was a bit careless like, an' fell in arter 'im an' laid myself aht. An' when I come round the 'ole wood was alive wiv bleedin' cats. So I 'ad ter light a fire, see?

An' the ole stag well, 'e got burned

Pardi interrupted. He was standing beside the chief. At the sound of the high-pitched, womanish voice Enery looked at the warden with disfavor.

"Thus it is," cried Pardi, "wiv those 'oo don't show ARP 'is proper respects. 'E don't guide their arrers, 'E don't. 'E don't put out the fire for 'em—not 'im! Not even when the fire is a-burning up food for the chief's own table. 'E don't never forget the un-believers, 'E lets 'em come 'ome empty-'anded-an' larfs.'

"Empty-'anded, is it, yer little, sawed-off runt?" demanded the hunter. "Empty-'anded my left foot! Look, guv'ner! I found this for yer! I brought it back for yer!"

He fumbled in his pouch, fetched out the little box. Curious, Bart took it, and his big, clumsy seeming hands handled it with

reverent care

"A book," he said. "One o' them books wot the Old 'Uns made." He opened it, leafed through it. "An' picshers!" he cried. "Reel picshers! I must show young William this. 'E carn't do nuffin like it!" The deepset eyes behind the gray, matted hair gleamed lecherously.

"Lemme see! Lemme see!" clamored Pardi, standing on tiptoe to peer over the

chief's shoulder.

"Garn! Yer dirty old man!" growled Bart. "This ain't for the likes o' you. Yer knows as 'ow the wardens 'as got ter be pure in mind an' body!"

"That ain't nuffin ter do wiv it! This book should be put among the uvver treasures of ARP, for 'Is safe keeping."

'So the warden of ARP can feast 'is dirty old eyes on it yer mean. No, Pardi, you ain't gettin' it. An' I ain't keepin' it-more's the pity. This 'ere book is goin' on a long trip termorrer-it's 'igh time I called on them two Mack brothers. They're fair batty over things like this, the pair of 'em. An' since my own smith can't turn out a decent pot or kettle to save 'is life—then your pore. old chief 'as ter go out of 'is own country to barter for 'em.

"You can go," he concluded. "No, not you, Enery. You stays 'ere an' 'as a sup o' beer along o' me. An' we'll look at these 'ere picshers while we 'as the chance.'

Two days' riding it was to the Village of Mack. Two days, that is, provided that all went well.

But the rarely used road was in a shocking condition, and all its inequalities had been baked hard by the late summer sun. This did not delay the dozen young menled by Enery—of Bart's mounted bodyguard. They could have made the journey in half the time, but the speed of the party was, of necessity, slowed to the pace of the chief's gaudily painted caravan. He was an old man,

he was fond of saying, and liked taking his comforts with him. It would have been better if his blacksmith, and not his youngest wife, had been on the list of comforts. For the rear axle of the cumbersome vehicle broke, and it took Enery and his companions all of six sweating hours to effect crude and temporary repairs.

The first night they camped by the road-side, several miles short of the Village of Les, in which settlement they should have spent the night. And nobody got much sleep. One of the rare nocturnal packs of hunting dogs was on the prowl and laid siege to the encampment. With a fire, and with twelve armed men, there was little danger. But there

was no rest

At the Village of Les there was a brief halt for gossip and refreshment, for the proper repair of the broken axle by Les' smith. And Les and Bart had to waste an hour or so in gloating over the pictures in the book.

Perhaps Bart would have stayed there the night, but the other chief obviously desired the trophy that Enery had brought back from the cavern of the Ancients. He was offering quite fantastically high prices in fowls and eggs-both of which commodities Bart had in abundance in his own country. And the name of Les and his people was a byword for thievery and all kinds of dis-honesty. So Bart, at last, gave the order to push on.

Again they would have camped by the road. But the Romans were out-a war party of at least twenty bucks. Enery saw the dust raised by their ponies' hoofs whilst they were still miles distant. And when they came sweeping across the undulating plain, at right angles to the road, the hunter and his men were ready for them. Some-together with Bart and his wife—had taken cover in a clump of trees. Others were hiding behind the caravan. As soon as the raiders came within range they were greeted with a shower of arrows. A lucky shot-an' I didn't pray to Mr. Bleedin' ARP neither, thought Enery—took their leader in the throat. He fell from his pony, and the animal came to an abrupt standstill, stood nuzzling the body of its late master.

"'Old yer fire!" shouted Bart to his men. "Don't rile them baskets any more. Let 'em take their chief away an' they won't be back till they've picked a new 'un!"

And it was so.

And Bart decided, wisely, to keep moving, as fast as possible. To arrive at the Village of the Mack Brothers in the early hours of the morning was better than not to arrive at all.

The village, save for the watch, seemed to be sleeping when the little procession creaked and plodded up the one narrow street. The thatched roofs on either side were humped dark and ominous against the stars.

And there were those in the bodyguard who remembered, with a superstitious shudder, that neither Mack the Elder nor Mack the Younger followed ARP, that they had long held the reputation of being sorcerers. This, in itself, was nothing—but it was said that the Mack sorceries worked.

Halfway up the street, standing on a slight eminence, was a house larger than the others. And there was someone awake in this house -someone awake and working. streamed through the crevices of a shuttered window, and there was the sound of metal

beating on metal.

Old Bart, perched high on the driving seat of his caravan, gave the order to halt. He threw down the reins and they were caught by one of the bodyguard who had already dismounted. He clambered down from his

"They're up yet," he growled. Slowly, ponderously, he stumped to the door of the house. He hammered upon it authoritatively. Somebody-a small, thin silhouette against the light from withinopened it.

"Bart," said the chief. "Bart, Leader of the People of Bart, to pay 'is respects to Old Mack an' Young Mack, Chieftains o' the People o' Mack."

The figure in the door turned, shouted back to the interior of the house: "It's Bart,

"This is an odd time to come a visiting!" replied a deep male voice. "All right, Beth. Ask 'im in!"

"But he's got about half a hundred men

They can't come in Leave 'em to find

some place to sleep.

"Orl right," growled Bart. "Orl of yer find some place ter kip—an' don't let me find any of yer in my caravan! 'Op it!"

As the huntsman turned to go the chief

called him back.

"No, Enery. You stay wiv me. 'Ave yer got the book?"

"No, guv'ner. You 'ave."
"So I 'ave. An' you'd better leave yer bow an' arrers outside-these 'ere Mack chiefs

are rather fussy.

It was light inside the House of Mackso much so that the two visitors blinked, dazzled. Here were no crude, tallow candles such as lit the homes in their own village. There were, instead, lamps of brass, the flame shaded with a shield of translucent horn.

Enery looked at the girl who had let them in. Slight she was, red-haired and freckled, with sea-green eyes. She was tall, too—far above the average. With her the dumpy womenfolk of the People of Bart compared most unfavorably. She was like-he searched his mind for a simile—she was like the women in the pictures in the book.

Gravely, she returned his stare. Then she

turned abruptly. She led the two men along a short passage, opened a door leading into a large room. She motioned them in.

It was a strange room. It was half studyalthough the word had long since passed out of use-and half workshop. There were shelves along the two of the walls, and on them were rows of the little boxes of fabric called books. And in one corner of the room there was a forge, and an anvil. At this Young Mack was working, beating away at a piece of metal.

Old Mack—his silvery hair clean, his lined face shaven-advanced with outstretched hand, to greet them. His pale gray eyes were friendly and it seemed to Enery that he treated Bart with an affectionate respect.

"Well," he said, "an' what can I do for

ye?"

"I've a present for yer, Mack-and an' 'ard enough time I 'ad bringing it! Mind you," continued Bart hastily, "even though it is a present I shouldn't say no to a few o' yer brother's good pots and pans in return.

"An' let's see your present first, Bart."

"Ere!

Old Mack took the little box of fabric.

"Anither book!" he breathed.
"Book?" barked Young Mack. Black haired, swarthy, sweating from his fire, he came to look. He looked over his brother's shoulder. Then he spat disgustedly. "More o' yon muck!" was all that he said. He went back to his workbench, busied with what looked like a sort of water wheel with metal

"Wot does it say?" demanded Bart. "Wot

does it say?"

"Tis a song. Tis one o' the songs of ncients. Ay, 'tis strange stuff—but not Ancients. Ay, 'tis strange stuff—but not wi'out its ane beauty. But even I canna fathom what you man who wrote it was driving at.

At his bench Young Mack was pouring water from a jug into a polished copper cylinder. He screwed home the cap of this cylinder. The girl Beth was beginning to take down the shutters from the windows. Enery was helping her.

"Ay, an' the pictures," went on Old Mack. "Tis a bonny wee book, friend Bart, an Ah'll see what ma brither has tae gi'e ye."

'An ye're barterin' ma guid pots an' pans for you trash?" demanded the man at the workbench.

"It is getting light, Uncle," said Beth from the window.

"Never mind that. Fetch me fire, girl, tae put under ma wee boiler!

"But what does it say, Old Mack?" de-manded Bart. "Wot does it say? If it is a song, carn't yer sing it?

There was a pause, a silence, broken only by the faint hiss of escaping steam. The pale

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light of early morning streamed through the windows.

'Tis not that kind o' song, Bart."

The old man began to mumble. All that his hearers got was a sense of rhythm. He was reading for himself alone. Then, freakishly, his voice came loud and clear.

"The stars are fading, and the Caravan Starts for the Dawn of Nothing. . . ."

"Hurry!" shouted Young Mack. "More fire! Quick!"

A jet of steam impinging on its blades, the little wheel was revolving rapidly.

DANCE OF A NEW WORLD

(Continued from page 54)

somebody meet him and get him cleared and out to the school, will you?"

"Sure thing. What else have you got on your mind? From your tone that isn't all you called about."

"It isn't. I've got an exec for you, Frank."
"Good! A competent man?"

"I guess so. At least he's had the proper background for it."

"Don't keep me in suspense. Who is the man?"

"Me," Shane said flatly.

Frank Allison looked at him for long seconds, no trace of expression on his face. "Are you serious, Shane?"

"Completely, Frank."

Allison moved away from the screen. Shane waited impatiently. In a few moments Allison was back and Shane was mildly shocked to see that the man was smiling broadly. "I had a little detail to attend to, Shane. I had to collect ten bucks. You see, I had a bet with West. We had you picked for the job for the last seven months, but in order for you to qualify for it, the idea had to originate with you. If it didn't, Psycho wouldn't approve your arbitrary assignment to the spot. Congratulations!"

Shane Brent wanted to laugh as he real-

ized Allison had been playing almost the same game with him that he had been playing with Hiram Lee.

"I won't be back, Frank," he said quietly. Allison sobered. "I had hoped you would, Shane. It's your privilege to make your own choice. I had hoped that seven years from now, with your experience on this project, you'd be fitted to come in here and take my job."

"I'm sorry, Frank," Shane said.

Allison sighed, "So be it. When will you be in?"

"I'll wait until she can come with me. It'll be Flight Eight probably. I'll confirm."

There was deep affection in Allison's smile. "Whoever she is, boy, I'm sure that she's a very lovely person. See you when you get here."

The screen darkened. He stood for a moment and looked at its opaque dead grayness. He didn't see the screen. He saw, instead, a distant planet. He saw himself standing in a clearing, his hands hardened with pioneer labor. Above him was an alien sky. Beside him was a tall girl. Her hair of purest gold blew in the soft breeze.

Shane Brent turned and walked quickly from the small room. Caren would be

waiting.

